

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MONTANA
MISSOULA DIVISION

COLUMBIA FALLS ALUMINUM
COMPANY, LLC,

Plaintiff,

vs.

ATLANTIC RICHFIELD
COMPANY,

Defendant.

CV 18–131–M–DWM

FINDINGS OF FACT AND
CONCLUSIONS OF LAW

The trial in this case arises out of a dispute between Plaintiff Columbia Falls Aluminum Company, LLC (“CFAC”) and Defendant Atlantic Richfield Company (“ARCO”) over the parties’ respective environmental liabilities at an aluminum smelter in Columbia Falls, Montana (“the Site”). In July 2018, CFAC sued under the Comprehensive Environmental Response, Compensation, and Liability Act (“CERCLA”) and its state analog (the Montana Comprehensive Environmental Cleanup and Responsibility Act, or “CECRA”), seeking cost recovery and contribution for its liability as the current owner and operator of the Site. ARCO counterclaimed and argues that the parties’ 1985 Acquisition Agreement bars suit and that, even if it did not, CFAC cannot recover under either CERCLA or CECRA.

A 7-day bench trial took place in Missoula, Montana beginning on June 28,

2021. CFAC presented seven witnesses:

- Andrew Baris, remediation expert;
- David Batson, allocation expert;
- John Stroiazzo, a Glencore consultant at the Columbia Falls facility;
- William Munro, cleanup cost expert;
- Andrew Otis, CFAC's regulatory counsel;
- Jeffrey Dunn, rebuttal financial expert; and
- Kraig Kosena, rebuttal appraisal expert.

ARCO presented six witnesses:

- Brian Johnson, strategy manager for ARCO;
- Marcia Williams, industrial site closure expert;
- Peter Jewett, remediation expert;
- David Hall, financial expert;
- Thomas Stevens, appraisal expert; and
- Gayle Koch, cleanup cost expert.

The parties also presented deposition testimony of:

- Steven Wright, CFAC's only employee and Site Manager;
- Subodh Das, ARCO environmental manager in the 1980s; and
- John R. Lucas, ARCO attorney involved in 1985 acquisition.

Notably, neither party deposed or called Brack Duker as a witness in the case even though he was a critical player in disposing of ARCO's assets and negotiating the 1985 Acquisition Agreement in favor of his new company.

Based on the evidence and testimony presented at the trial, and further considering the applicable law and the parties' written submissions, the following findings of fact and conclusions of law are made pursuant to Federal Rule of Civil Procedure 52.

TABLE OF ACRONYMS

ARCO	Atlantic Richfield Company
CECRA	Comprehensive Environmental Cleanup and Responsibility Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFAC	Columbia Falls Aluminum Company, LLC
EPA	United States Environmental Protection Agency
MDEQ	Montana Department of Environmental Quality
MDHES	Montana Department of Health and Environmental Sciences
MPDES	Montana Pollutant Discharge Elimination System
PAH	polyaromatic hydrocarbon
PCB	polychlorinated biphenyl
PRP	Potentially Responsible Party
RCRA	Resource Conservation and Recovery Act

SPL Spent Potliner
WSSP Wet Scrubber Sludge Pond

TABLE OF CONTENTS

I. OPERATIONAL HISTORY.....	6
II. PARTY ARGUMENTS.....	16
A. CFAC.....	16
B. ARCO.....	17
III. CONTRACTUAL LIMITATIONS ON SUIT.....	17
A. The Agreements.....	18
1. The Acquisition Agreement.....	18
2. The Supplemental Agreement.....	20
3. 1988 Settlement.....	21
B. Section 10.....	22
1. Covenant Not to Sue.....	23
2. Assumption of Environmental Liabilities.....	38
3. Conclusion.....	40
IV. SITE OVERVIEW.....	41
A. Waste Streams.....	41
1. Spent Potliners (“SPL”).....	41
2. Wet Scrubber Sludge.....	43
3. Soaking Pits.....	44
4. Other Wastes.....	45
5. Technological Advancements.....	46
6. Permitted Discharges.....	47
B. Site Conditions.....	50
1. West Landfill.....	51
2. Wet Scrubber Sludge Pond (“WSSP”).....	54
3. Center Landfill.....	59

4.	East Landfill.....	60
5.	Industrial Landfill	62
6.	Asbestos Landfill	63
7.	Former Drum Storage Area	63
8.	Soil North of Main Plant Buildings.....	64
9.	North Percolation Ponds	65
10.	Groundwater	67
C.	EPA Action and National Priority List.....	77
1.	Initial CERCLA Investigation	77
2.	The Remedial Investigation.....	81
3.	The Feasibility Study.....	84
V.	CERCLA COST RECOVERY.....	87
A.	EPA Remediation	94
1.	EPA.....	94
2.	Roux.....	94
3.	ERM Consulting & Engineering	95
4.	Hydrometrics, Inc.	97
5.	MBS GeoConsulting, Ltd.	98
B.	South Percolation Ponds	100
1.	Morrison-Maierle, Inc.....	107
2.	Montana Helical Piers.....	107
3.	Sandry Construction	108
C.	Plant Demolition and Backfilling.....	109
1.	Calbag	109
2.	Aqua Terra Restoration	114
D.	Removal of Hazardous Materials and Wells	115
1.	Mountain States Environmental Services, Inc.....	115
2.	IRS Environmental	116
3.	MWC Viking Pump.....	117
E.	Public Relations	118

1. Allegra Marketing.....	118
2. Ann Green/Mary Green Communications.....	118
3. Haley Beaudry	121
4. Jacob Hall Design.....	121
5. Sard Verbinnen & Co.	122
F. Attorney Fees	122
G. Glencore/CFAC Employees	126
H. Costs Barred By Agreement	129
VI. EQUITABLE ALLOCATION	131
A. CFAC’s Proposed Allocation	133
B. ARCO’s Proposed Allocation.....	140
C. The Court’s Allocation	140
1. The Gore Factors	140
2. Additional Equitable Considerations.....	147
D. Conclusion	154
VII. CECRA	155
VIII. CONCLUSION.....	156

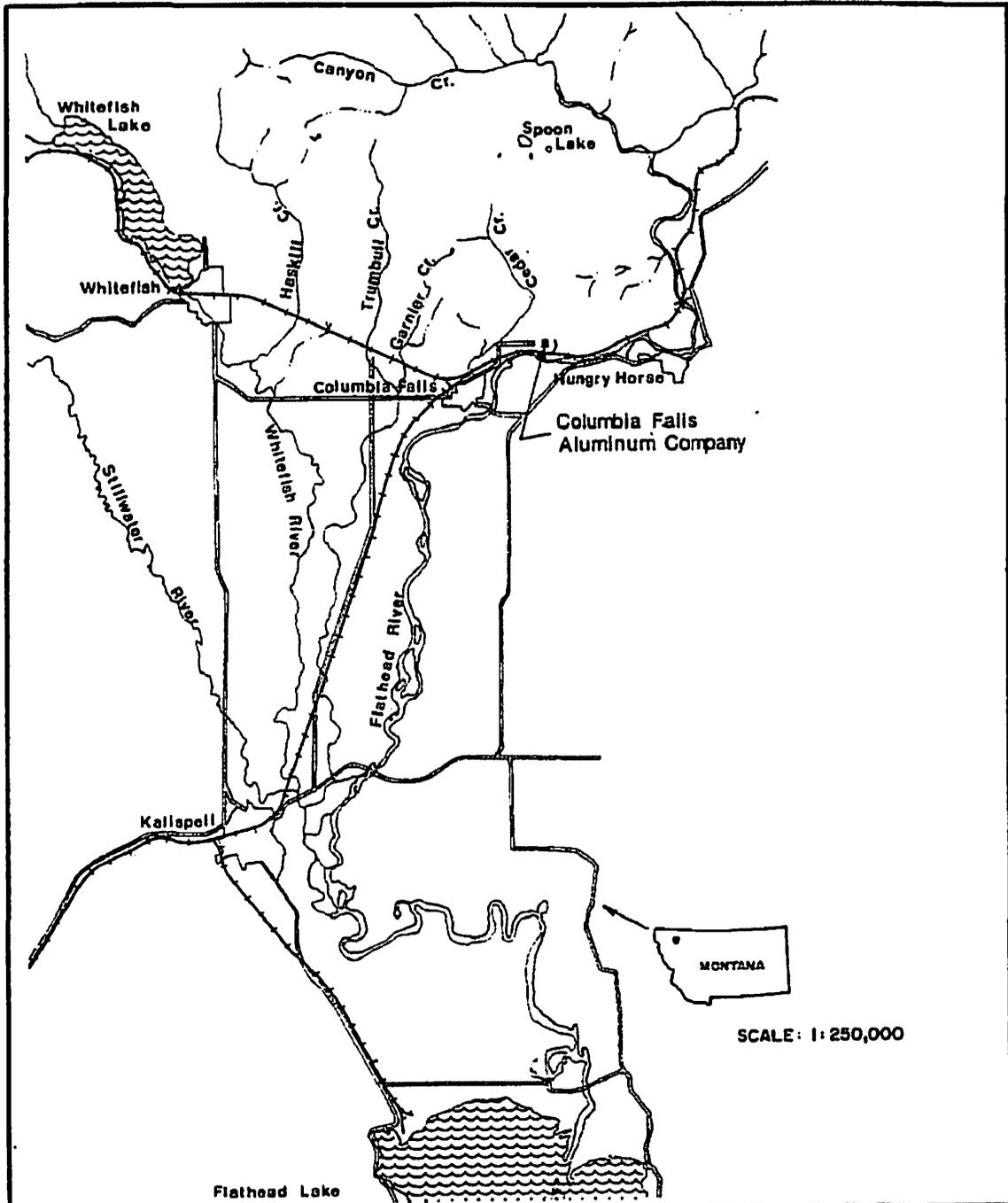
I. OPERATIONAL HISTORY

1. Defendant Atlantic Richfield Company (“ARCO”) is a corporation organized under the laws of the state of Delaware, with its principal place of business in Texas. (Agreed ¶ 1.)

2. Plaintiff Columbia Falls Aluminum Company, LLC (“CFAC”) is a limited liability company organized under the laws of the state of Delaware, with its principal place of business in Columbia Falls, Montana. (Agreed ¶ 2.)

3. The former aluminum reduction facility that CFAC owns, located near Columbia Falls, Flathead County, Montana (“The Site”), is located at 2000

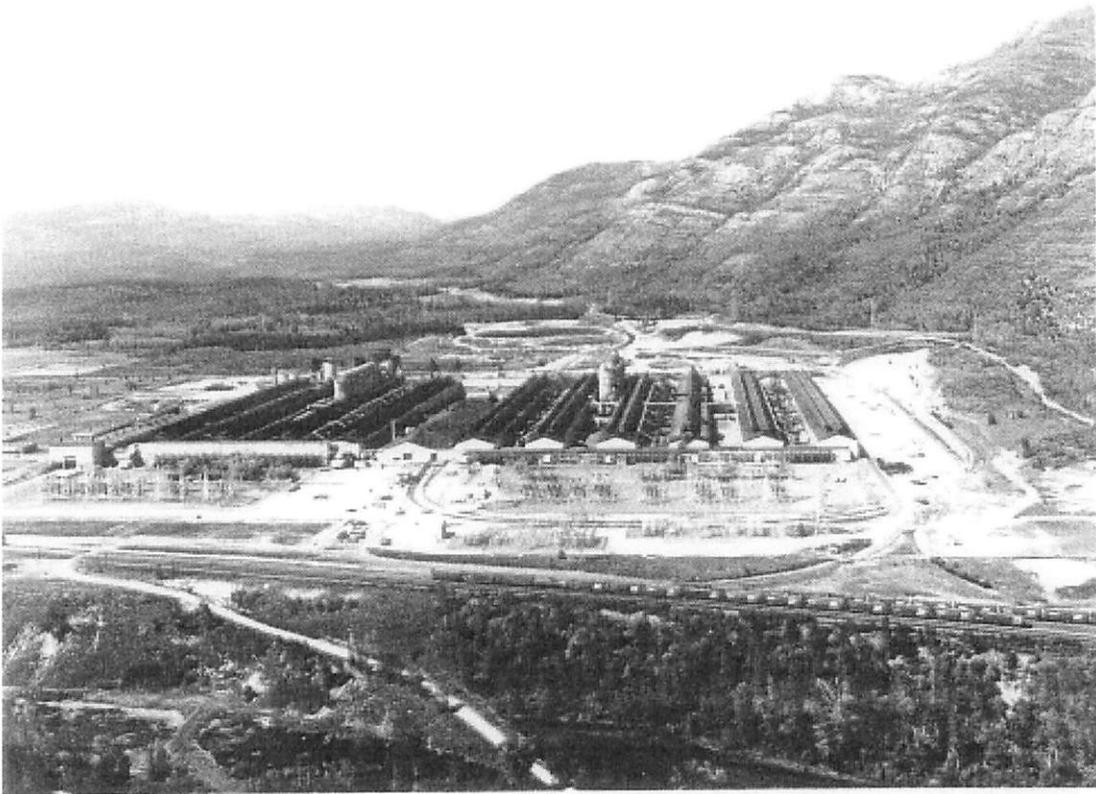
Aluminum Drive, two miles northeast of Columbia Falls, Montana, and lies north of the Flathead River, west of Teakettle Mountain, south of Cedar Creek Reservoir, and east of Cedar Creek. (Agreed ¶ 3.)



(Ex. 260 at 9.)

4. ARCO, including its corporate predecessors, Anaconda Aluminum Company and Anaconda Copper Mining Company (together “Anaconda”), owned real property and/or conducted industrial operations at the Site from 1955 to 1985. (Agreed ¶ 5.) ARCO is now part of bp, or British Petroleum. (Johnson.)

5. In 1955, Anaconda completed construction of the aluminum reduction facility and began production of aluminum at the Site. (Agreed ¶ 7; *see also* Ex. 230 at 6.)



(Ex. 230 at 118.)

6. CFAC—through its corporate predecessors, Montana Aluminum Investors Corp. and Columbia Falls Aluminum Company, a Montana Corporation—acquired the Site from ARCO in September 1985, conducted industrial operations at the Site including operating the aluminum reduction facility during the period of 1985 to 2009, and currently owns the Site. (Agreed ¶ 6.) Glencore is CFAC’s parent company. (Stroiazzo.)

7. The industrial ownership timeline for the Site is as follows:

1951 to 1978: Anaconda

1978 to 1985: ARCO

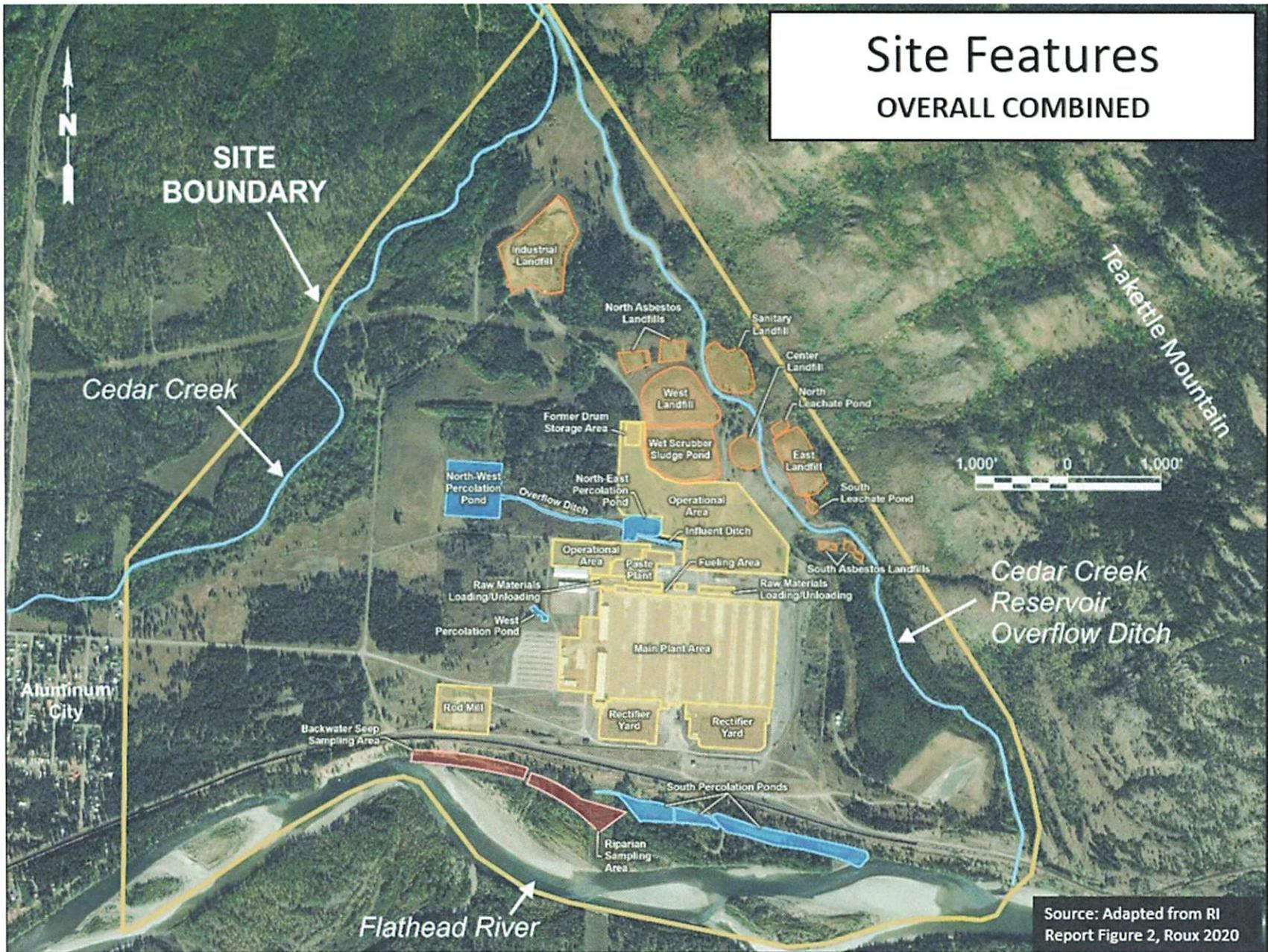
1985 to 1999: Montana Aluminum Investors Corp.

1999 to present: CFAC

(Ex. 134 at 45.) References herein to ARCO include actions and operations of Anaconda and references to CFAC include the actions and operations of Montana Aluminum Investors Corp.

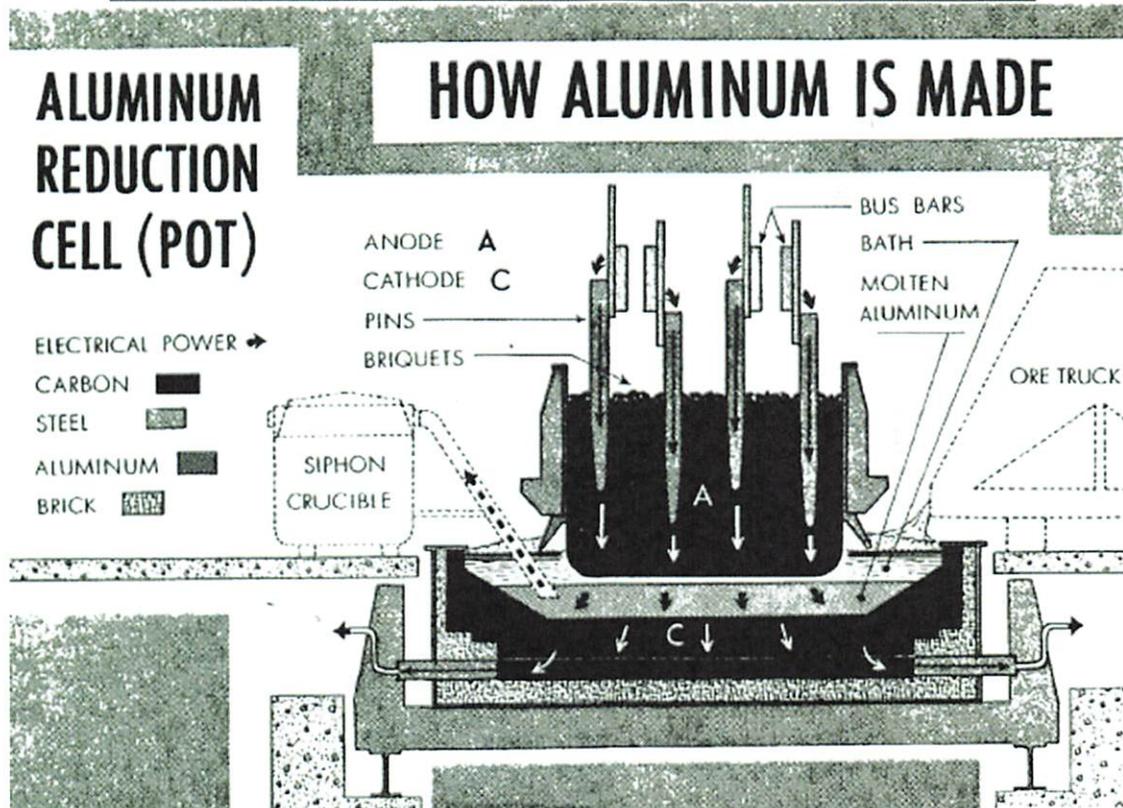
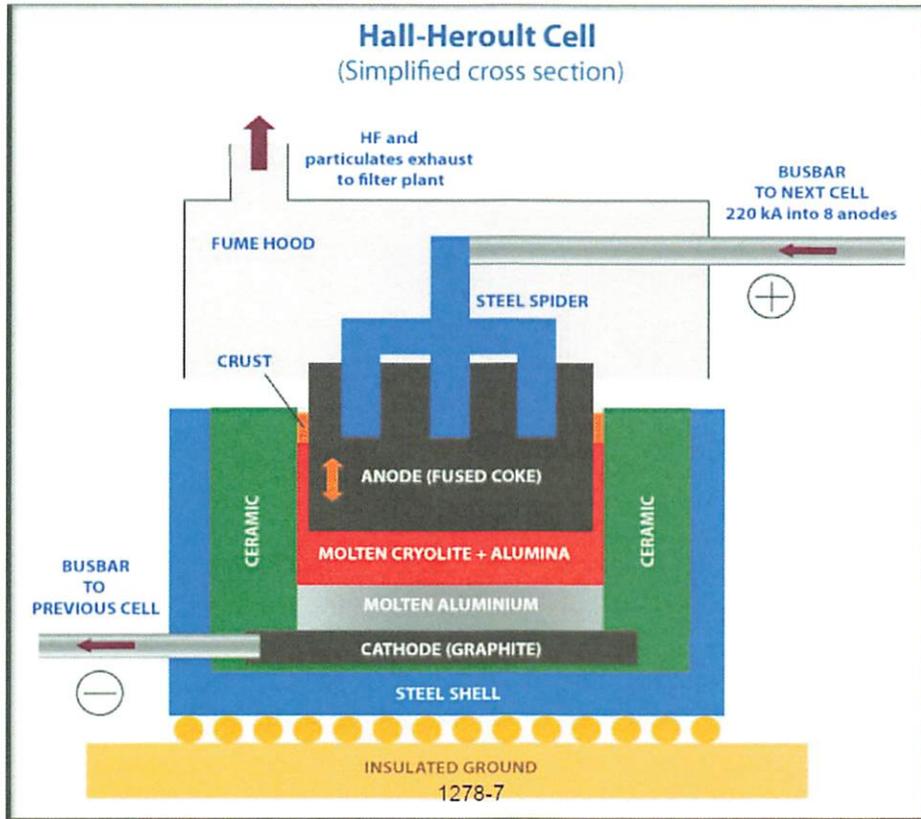
8. The operational area of the Site, commonly known as the Anaconda Aluminum Co. Columbia Falls Reduction Plant, occupied approximately 953 acres. (Ex. 26 at 8.) The following site features map depicts the location of different Site operational areas which are addressed in more detail below:

(Agreed ¶ 4; Ex. 848 at 2; see also Ex. 134 at 304.)
10



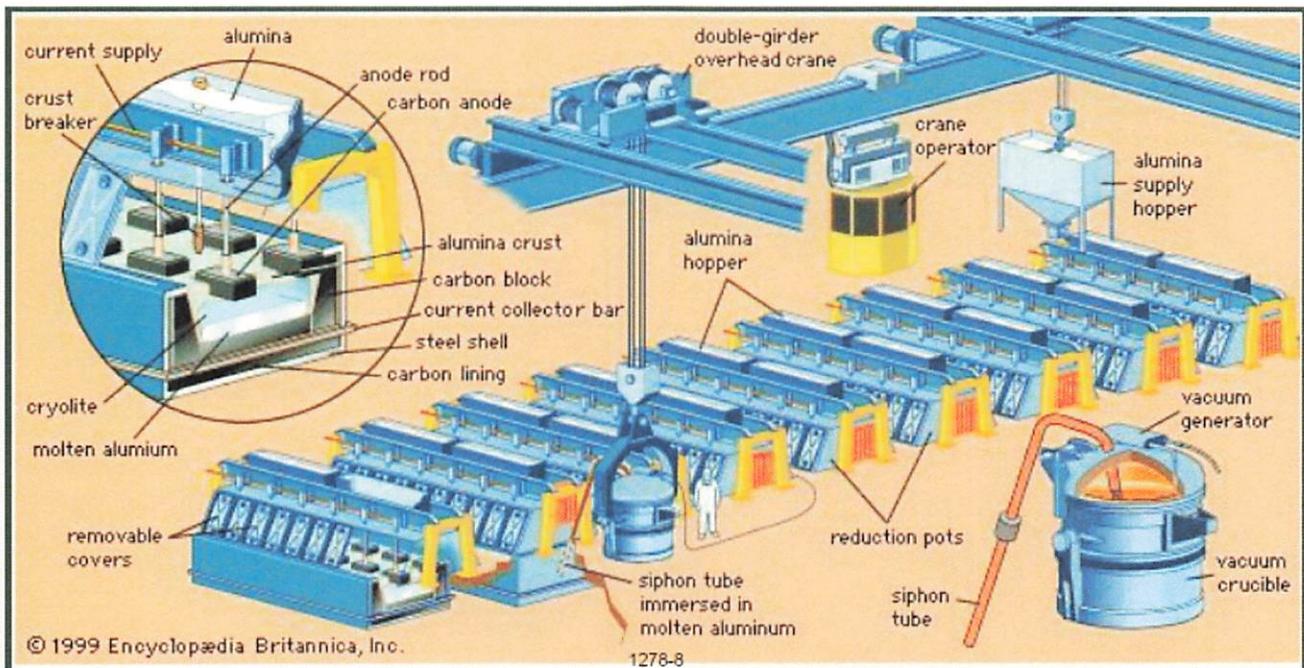
Source: Adapted from RI Report Figure 2, Roux 2020

9. Both ARCO and CFAC produced aluminum at the Site using the Hall-Héroult process and vertical stud Soderberg aluminum cell technology. In this process, aluminum was produced in an aluminum production “pot,” a steel vessel which was lined with carbon paste, or “potliner.” Each pot was charged with a mixture of powdered alumina (aluminum oxide) and cryolite (sodium fluoride), to which a high electric current was applied through an anode (made of petroleum coke and pitch) at the top of the mixture. The current passed from the anode through alumina/cryolite bath to the potliner, which acted as a cathode and completed a circuit. The application of current also created high heat in each pot (1760° F (960° C)). As a result, aluminum ions in alumina were reduced to aluminum metal, forming molten aluminum at the bottom of the pot. The molten aluminum was periodically tapped from the pot and transported to the Site’s Cast House, where it was cast into ingots for offsite shipment. Over the years, as part of the casting process, various alloys and ingots were produced at the facility. (Agreed ¶ 8; Ex. 134 at 45.) Diagrams of the aluminum production process are provided below:



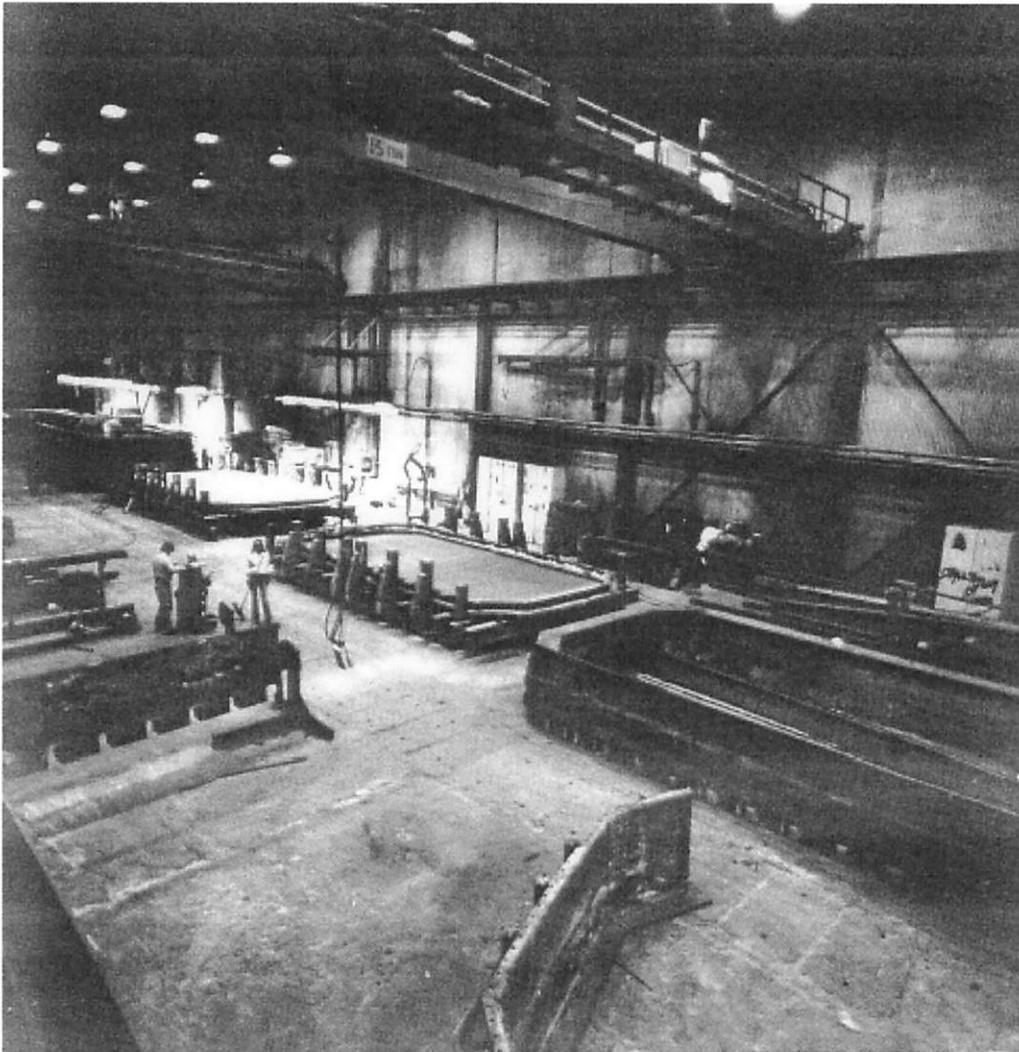
(Ex. 1278 at 7; Ex. 230 at 52.)

10. Initially in 1955, ARCO built two potlines with 120 pots in each potline and a nominal capacity of 67,500 metric tonnes per year. A third potline of 120 pots was added in 1965, and the fourth and fifth potlines, also having 120 pots each, were added in 1968, increasing total aluminum production capacity at the Site to 180,000 metric tonnes per year. (Ex. 134 at 45; Ex. 230.)



(Ex. 1278 at 8.)

11. Prior to 1980, the average life of a cathode/pot was short (3 to 4 years). (See Ex. 230 at 126; Ex. 294 at 9.) Technological improvements, including the installation of “Sumitomo” technology in the early 1980s, extended the lifespan of a potliner to seven to nine years. (Ex. 294 at 9; Ex. 260 at 15.) An image of the pot line from the Site is provided below, (Ex. 230 at 126):



12. ARCO produced an estimated 7,104,464,396 lbs. (3,222,531 metric tonnes) of aluminum between 1955 and September 1985, when it sold the Site to CFAC. (Agreed ¶ 9; *see also* Exs. 283, 720.)

13. CFAC produced an estimated 6,319,833,296 lbs. (2,866,628 metric tonnes) of aluminum between October 1985 and 2009, when it stopped producing aluminum. (Agreed ¶ 10; *see also* Exs. 283, 720.)

14. The aluminum production volumes (in lbs.) are detailed below:

Atlantic Richfield 1955- Sep. 1985		CFAC Oct. 1985-2009	
Year	Production (lbs.)	Year	Production (lbs.)
1955	29,600,731	Oct. 1985-Dec. 1985	91,525,427
1956	123,461,000	1986	367,594,000
1957	104,403,000	1987	371,200,000
1958	100,588,000	1988	366,104,000
1959	102,320,000	1989	369,366,000
1960	114,142,000	1990	370,264,000
1961	126,770,000	1991	370,292,000
1962	135,107,000	1992	374,864,000
1963	136,017,000	1993	284,475,420
1964	138,919,000	1994	279,758,900
1965	163,366,000	1995	331,606,716
1966	213,461,000	1996	372,290,190
1967	213,127,000	1997	377,474,544
1968	211,694,000	1998	373,220,977
1969	356,485,000	1999	372,355,263
1970	358,877,000	2000	350,319,829
1971	346,610,000	2001	13,564,835
1972	357,304,000	2002	148,659,588
1973	304,064,000	2003	106,649,215
1974	342,028,000	2004	74,536,594
1975	257,660,000	2005	73,339,813
1976	294,011,000	2006	74,688,639
1977	309,641,000	2007	199,995,579
1978	309,420,000	2008	167,942,952
1979	315,462,000	2009	37,744,815
1980	332,043,000	Total	6,319,833,296
1981	335,830,000		
1982	215,617,000		
1983	170,990,000		
1984	318,809,000		
Jan. - Sep. 1985	266,637,665		
Total	7,104,464,396		

(Agreed ¶ 11; Ex. 720.)

15. Around 2001, CFAC temporarily ceased aluminum production, shutting down the facility so it could instead sell electricity into the West Coast wholesale electricity market. (See Ex. 283 at 99, 105.)

16. CFAC announced the permanent closure of the facility in 2015 and completed the decommissioning and removal of the industrial buildings and related structures in the third quarter of 2019. (Agreed ¶ 12; Ex. 134 at 44.)

II. PARTY ARGUMENTS

A. CFAC

17. According to CFAC, from approximately 1960 through approximately 1980, ARCO alone disposed of an estimated 129,000 to 135,000 tons of spent potliners (“SPL”), a principal waste generated by aluminum reduction which contained cyanide and fluoride in two unlined landfills: the West Landfill and the Center Landfill. ARCO alone also disposed of another waste from its aluminum production operations—sludge from wet scrubbers that was composed of 80 percent calcium fluoride—in the Wet Scrubber Sludge Pond (“WSSP”) from the beginning of ARCO’s operations at the Site through approximately 1979.

18. These onsite SPL and fluoride disposals by ARCO are primarily (if not in fact exclusively) responsible for the elevated concentrations of cyanide and fluoride observed in groundwater downgradient from these disposal areas. The SPL and fluoride disposals by ARCO, and the elevated groundwater concentrations, led the United States Environmental Protection Agency (“EPA”) to list the Site on the CERCLA National Priorities List in September 2016. The cyanide and fluoride leaching from the SPL disposed of by ARCO, and calcium

fluoride sludge disposed of by ARCO, are the principal drivers for the need to select and implement a cleanup remedy at the Site.

B. ARCO

19. According to ARCO, the present suit is foreclosed by the parties' 1985 Acquisition Agreement. But even if it is not, CFAC seeks to recover costs that are either not recoverable under CERCLA or for which it agreed to indemnify ARCO. Finally, to the extent any costs are recoverable, CFAC should be allocated greater responsibility for those costs based on the Acquisition Agreement, CFAC's failure to exercise due care in its operation and closure of the facility, CFAC's own discharges of hazardous materials, and the economic benefit CFAC realized or will realize from the Site.

III. CONTRACTUAL LIMITATIONS ON SUIT

20. As a threshold matter, the parties dispute whether CFAC is contractually barred from bringing this action against ARCO. Based on the evidence presented at trial, the contractual bone of contention is resolved in CFAC's favor. Even so, the proof at trial supports allocating a majority of the Site cleanup costs to CFAC under CERCLA's equitable allocation process, which is discussed below.

21. State law "provide[s] the general content of federal law on the validity of releases of claims of cost-recovery under CERCLA." *Mardan Corp. v. C.G.C.*

Music, Ltd., 804 F.2d 1454, 1460 (9th Cir. 1986). Accordingly, Montana law governs the interpretation of the parties' agreements here.

A. The Agreements

22. The parties entered into three agreements in the 1980s: the 1985 Acquisition Agreement, the 1985 Supplemental Agreement, and the 1988 Settlement. While all three are discussed below, the parties' dispute focuses primarily on the 1985 Acquisition Agreement.

1. The Acquisition Agreement

23. On September 10, 1985, ARCO and Montana Aluminum Investors Corp., CFAC's predecessor, entered into the Acquisition Agreement. (Ex. 1; Lucas.)

24. Through the Agreement, ARCO transferred to Montana Aluminum Investors Corp. the "Assets of the Smelter Business," as such term is defined in the Acquisition Agreement and sold all stock to Montana Aluminum Investors Corp. for the purchase price of \$1.00. (Ex. 1 at § 2(c).)

25. The Acquisition Agreement defines "Assets of the Smelter Business" as "those assets of Seller relating to the Smelter Business wherever they may be located," but excluding certain assets not relevant here, and explains "[a]s used herein, the phrase 'relating to the Smelter Business' when used with respect to any asset or liability of Seller is intended to designate those assets or liabilities that

have been used or are associated with the conduct of the Smelter Business.”

(Agreed ¶ 57; Ex. 1 § 1(a).)

26. The Acquisition Agreement contains indemnity provisions in favor of both ARCO, as Seller, and Montana Aluminum Investors Corp. (or CFAC), as Buyer. (Ex. 1, Section 10.) ARCO insists that pursuant to those provisions, CFAC agreed not to sue ARCO for environmental conditions at the Site after 1990 and/or assumed all environmental liability for the Site as of 1990, foreclosing the present action. The specific language of the indemnity provisions is provided below.

27. The Acquisition Agreement required Seller (ARCO) to “indemnify and hold Buyer harmless from and against: . . . (iii) All damages, losses, and out-of-pocket expenses (including attorneys’ fees) caused by or arising out of obligations or liabilities relating to the Smelter Business resulting from events or conditions in existence prior to the Closing Date.” (Agreed ¶ 58; Ex. 1 § 10(a), (a)(iii).)

28. The Acquisition Agreement requires Buyer (CFAC) to “indemnify and hold Seller harmless from and against . . . (iii) All damages, losses, and out-of-pocket expenses arising out of . . . obligations or liabilities, contingent or otherwise, relating to the operation of the Smelter Business after the Closing Date, other than obligations or liabilities as to which Seller is obligated to indemnify Buyer pursuant to Section 10(a)(iii).” (Agreed ¶ 60; Ex. 1 § 10(b)(iii).)

29. The Acquisition Agreement further provides: “Buyer’s obligation to indemnify Seller with respect to the liabilities and obligations referred to in clauses (ii) and (iii) of this Section 10(b) will be continuing.” (Agreed ¶ 61; Ex. 1 § 10(b)(iii).) But “Buyer may not make a claim with respect to . . . (B) Seller’s indemnity referred to in clause (iii) of this Section 10(a) at any time after August 31, 1990, except with respect to any such claim relating to the tax matters referred to in Article VIII” (Agreed ¶ 59; Ex. 1 § 10(a)(iii).)

2. The Supplemental Agreement

30. ARCO and Montana Aluminum Investors Corp. also entered into a “Supplemental Agreement” on September 10, 1985. Under the Supplemental Agreement, ARCO agreed to pay \$4 million into an escrow account, which Montana Aluminum Investors Corp. was authorized to draw upon for the purpose of paying certain operating expenses or liquidating expenses of the aluminum smelter facility for a period not to exceed five years. (Ex. 2: Lucas.)

31. If Montana Aluminum Investors Corp. earned an aggregate amount of \$10 million or more from its operations of the facility during the ensuing five-year period, the Supplemental Agreement required it to repay to ARCO the \$4 million deposited into the escrow account out of Montana Aluminum Investors Corp.’s subsequent earnings. (Ex. 2 at ¶ 4; Lucas.)

32. In approximately November 1988, Montana Aluminum Investors Co. repaid the \$4 million because it had hit the \$10 million benchmark (Ex. 9; Lucas.)

3. 1988 Settlement

33. On November 16, 1988, ARCO and Montana Aluminum Investors Corp. entered into a settlement agreement to “to compromise and settle certain matters which were in dispute between the two companies with respect to the operation of the [1985] Acquisition Agreement” (Ex. 1216.)

34. Among other things, the 1988 Settlement addressed an asbestos encapsulation program undertaken by Montana Aluminum Investors Corp. at the Site. (Ex. 1216 at ¶ 2.) ARCO agreed to pay one-half of the \$310,000 expended by Montana Aluminum Investors Corp. for asbestos encapsulation. In exchange for that \$155,000 payment, Montana Aluminum Investors Corp. agreed it would “continue to remain solely responsible for compliance with all environmental, health, safety and other regulations applicable to the operation of the Columbia Falls smelter with reference to the presence of asbestos containing materials.” (Ex. 1216 at ¶ 2.) CFAC also agreed to “defend and hold ARCO harmless against any claims which might be brought by any person with respect to or arising out of, the asbestos encapsulation program,” and “to waive and hereby release[] ARCO from any and all claims which Montana Aluminum Investors Corp. may presently have,

or may have in the future, with respect to the presence of asbestos containing material at the Columbia Falls smelter.” (Ex. 1216 at ¶ 2.)

35. ARCO transmitted the check for \$155,000 to CFAC on November 16, 1988. (Ex. 1216 at 1.)

36. CFAC therefore waived and released ARCO from any claims with respect to the presence of asbestos containing materials at the Site, including claims for costs associated with asbestos removal from the plant buildings and any cleanup or capping of the asbestos landfills at the Site. (*See* Ex. 1216.)

37. Consequently, CFAC cannot recover contribution for past costs of \$2.85 million related to asbestos abatement of the former Main Plant Building nor future costs for remedial action related to the Asbestos Landfills. Accordingly, ARCO’s Rule 52 motion is GRANTED as to CFAC’s asbestos costs.

B. Section 10

38. ARCO presents two defenses based on the language contained in Section 10 of the Acquisition Agreement. ARCO first argues that Section 10(a) acts as a covenant not to sue, barring CFAC’s claims for contribution and recovery under CERCLA and CECRA.¹ Failing that, ARCO argues that Section 10(b)

¹ ARCO did not make this argument in its pretrial motion for judgment on the pleadings. (*See* Doc. 128 at 8 n.3.)

shifted liability for pre-closing environmental conditions to CFAC at the time of the sale. These arguments are discussed in turn.

1. Covenant Not to Sue

39. Pursuant to Section 10(a), CFAC agreed that it “may not make a claim with respect to . . . (B) Seller’s indemnity referred to in clause (iii) of this Section 10(a) at any time after August 31, 1990.” As mentioned above, § 10(a)(iii) states that ARCO agreed to “indemnify and hold [CFAC] harmless from and against: . . . (iii) All damages, losses, and out-of-pocket expenses (including attorneys’ fees) caused by or arising out of obligations or liabilities relating to the Smelter Business resulting from events or conditions in existence prior to the Closing Date.”

40. ARCO characterizes this provision as a covenant not to sue, insisting that it applies to existing environmental liabilities prior to closing. (*See* Ex. 1 § 10(a)(iii); Doc. 128 at 10–13.) In response, CFAC argues that the covenant—to the extent there is one—is limited to CFAC’s contractual right to seek indemnity, not its ability to pursue a statutory right to recovery or contribution under CERCLA or CECRA. CFAC has the better argument.

41. In interpreting a contract under Montana law, a court’s job “is simply to ascertain and declare what is in the terms or substances contained therein, not to insert what has been omitted or omit what has been inserted.” *Ohio Farmers Ins. Co. v. JEM Contracting, Inc.*, 386 P.3d 613, 616 (Mont. 2016). “The role of a

court interpreting a contract provision is to ascertain and effectuate the parties' mutual intentions[,]" which is reflected in "[t]he clear and explicit language of the contract." *A.M. Welles, Inc. v. Mont. Materials, Inc.*, 342 P.3d 987, 989 (Mont. 2015); *AWIN Real Estate, LLC v. Whitehead Homes, Inc.*, 472 P.3d 165, 169 (Mont. 2020). "[A]n ambiguity exists only if the language is susceptible to at least two reasonable but conflicting meanings." *Mary J. Baker Revocable Tr. v. Cenex Harvest Sts., Coops, Inc.*, 164 P.3d 851, 857 (Mont. 2007). "[I]f the language of a contract is ambiguous, a factual determination must be made as to the parties' intent in entering into the contract." *Id.* "[E]vidence of the circumstances under which the contract was made and the matter to which it relates may [also] be considered." *Id.* "However, such evidence . . . is not admissible to add to, vary, or contradict the terms of the contract." *Id.*

42. The plain language of § 10(a) states that CFAC will not make a claim "with respect to" ARCO's "indemnity" as defined under the Agreement. As both sides agree, CFAC is not making a claim under the indemnification provision here. (*See* Doc. 128 at 11.) Rather, CFAC's claims are based on independent statutory obligations that could form the basis of suit regardless of whether CFAC had a contractual right of indemnity against ARCO. ARCO therefore argues that "claim" covers any type of claim so long as it is related to the matters covered by the indemnity provision. CFAC, on the other hand, insists "claim" is limited to an

indemnification claim under the Agreement. Because only CFAC's interpretation is reasonable, the provision is not ambiguous and does not foreclose the present suit.

43. ARCO relies on several out of jurisdiction authorities to argue that "with respect to" must be broadly construed to include any related matter. (*See* Doc. 128 at 10–12.) In doing so, however, ARCO ignores the fact that it is essentially arguing that CFAC waived its statutory right to bring a suit under CERCLA. To be sure, statutory rights created for a private benefit can be waived by contract. *See Collection Bureau Servs., Inc. v. Morrow*, 87 P.3d 1024, 1028 (Mont. 2004); Mont. Code Ann. § 1–3–204. But the waiver of statutory rights requires specificity as "waiver is the intentional and voluntary relinquishment of a known right, claim or privilege." *Morrow*, 87 P.3d at 1028–28.

44. Thus, to bar CFAC's claims, the language "with respect to" must be read to specifically waive independent statutory claims beyond those arising from the indemnification provision itself. Considering ARCO's own argument that "with respect to" broadens, rather than narrows, the scope of contractual language, such a reading is not tenable.

45. Because the broad waiver envisioned by ARCO is not sufficiently pointed to effectuate a waiver of CFAC's right to sue for recovery or contribution

under CERCLA or CECRA under the plain language of the provision, § 10(a) does not bar the present lawsuit.

46. Although the plain language is unambiguous, even if the Agreement's "with respect to" language was sufficient to create an ambiguity, the extrinsic evidence shows that CFAC did not waive its statutory rights. The parties' conduct shows that CFAC believed it needed to bring an *indemnification* claim by 1990, not necessarily *any* claim.

47. "Where an ambiguity in a contract exists, the court may turn to extrinsic evidence to determine the intent of the parties." *Ophus v. Fritz*, 11 P.3d 1192, 1196 (Mont. 2000). At trial, the parties presented evidence surrounding the Acquisition Agreement. More specifically, ARCO presented testimony of John Lucas, a former ARCO in-house lawyer, and Subdoh Das, a former ARCO environmental manager. CFAC did not present any witnesses on this issue. Both parties offered several documentary exhibits, including correspondence leading up to the 1985 sale and following the acquisition between 1985 and 1990. That evidence is described below. As stated earlier, neither party sought proof from a critical witness both as to the CFAC acquisition and the contracts at issue, Brack Duker.

i. The Sale

48. The signatories to the 1985 Acquisition Agreement were Claude Goldsmith on behalf of ARCO and Brack Duker on behalf of Montana Aluminum Investors Corp. (Agreed ¶ 56; Ex. 1.) Claude Goldsmith is deceased and no one remaining at ARCO has personal knowledge of the Acquisition Agreement. (Johnson.) While Duker is alive, (*see* Doc. 42 at 29), he was not called as a witness at trial.

49. Duker, who became a principal of Montana Aluminum Investors Corp. and later CFAC, was in charge of divesting the Columbia Falls smelter when he worked at ARCO. (Das; Lucas.)

50. At the time of the sale, there were other companies potentially interested in acquiring the Site, such as Reynolds and Kaiser (other aluminum smelters). (Das.) While Das did not have any direct contact with Duker, Das got the impression that Duker actively tried to discourage a third-party sale in order to acquire the facility as a new going concern. (Das.)

51. That new concern included several existing ARCO employees, such as Jerome Broussard, Thomas Payne, Donald Ryan, and Ken Reick. (*Compare* Ex. 30 (details the organizational structure under ARCO) with Ex. 1225 (details the organizational structure under CFAC).)

52. ARCO ultimately sold the facility to Montana Aluminum Investors Corp., its former employees, for \$1.00. (See Exs. 241, 243, 244.)

53. The sale was not without benefit to ARCO, however, as the company had decided to “withdraw from the primary aluminum business” and was going to either sell or liquidate the facility. (See Exs. 244, 245.) Despite the sale price of \$1.00, ARCO would have lost more money liquidating the facility than selling it to Montana Aluminum Investors Corp. (See Ex. 112 at 5, 10 (projecting savings of \$7 million).)

54. Because the Agreement was between ARCO and its own divestiture team, there is no basis for construing the provisions at issue for or against a particular party. *AWIN Real Estate, LLC*, 472 P.3d at 171 (rejecting principle that contract should be construed against drafter as an “absolute rule”).

ii. Subsequent Conduct

55. Other than the above, much of the extrinsic evidence presented at trial regards the parties’ post-contract conduct, that from 1985 to 1990. More specifically, ARCO presented evidence that CFAC (1) sought to amend the Acquisition Agreement in 1986 and (2) made several environmentally related indemnification demands prior to 1990.

56. “Where the language of a contract is doubtful and ambiguous, the conduct of the parties under the contract is one of the best indications of their true

intent.” *Watters v. City of Billings*, 451 P.3d 60, 67 (Mont. 2019) (cleaned up); *see also Ophus*, 11 P.3d at 1196 (“The practical interpretation of a contract, which the parties placed upon it by their course of conduct, is entitled to great, if not controlling influence in ascertaining what they understood by its terms.”).

57. In this case, CFAC’s post-contract conduct shows that while it believed it could not bring an indemnification claim against ARCO after 1990, it did not necessarily believe it was barred from bringing a statutory claim.

58. In 1986, CFAC sought to amend the Acquisition Agreement to “waive ARCO’s August 31, 1990 deadline for [CFAC] making of claims under §10(a)(iii) of the Agreement for all claims related to environmental hazards,” among other things. (Ex. 3; Lucas.)

59. The proposed amendment also requested that ARCO “acknowledge[] and accept[]” the environmental claims CFAC had been attempting to assert against ARCO under the terms of the indemnification provision. (Ex. 3; Lucas.) The draft amendment required ARCO to accept such claims even if “the nature, scope and extent” of the claim was not known by the August 31, 1990 deadline and no actual claim had been made against CFAC before August 31, 1990. (Ex. 3; Lucas.) The proposed amendment specifically references government and state ordered remediation, (*see* Ex. 3 at 4), but stops short of addressing statutory

obligations. To the contrary, the references therein once again cite the parties' contractual indemnification obligations.

60. Lucas, who received the draft amendment from CFAC, testified that the proposed amendment was "completely inconsistent with the fundamental nature of the" Acquisition Agreement, which was that ARCO's liability ended on August 31, 1990. Thus, ARCO did not agree to the amendment. (Lucas.)

61. From 1985 through 1990, CFAC also made a series of indemnification demands on ARCO, specifically attempting to assert indemnity claims for costs related to SPL in the landfills, cyanide and fluoride in the groundwater, and other environmental issues that are the subject of the current lawsuit. (Lucas.)

62. The primary person who responded to these indemnification demands for ARCO was Lucas and the primary persons who made these indemnification demands for CFAC were Duker and Payne. (Lucas; *see* Ex. 4.)

63. On January 4, 1988, Payne, on behalf of CFAC, sent a letter to ARCO, copying Lucas, advising ARCO that EPA had visited the Site and discussed "past practices and closed disposal practices" with individuals at CFAC. (Ex. 5 (letter is misdated as 1987); Lucas.) Payne also stated that "per section 10(a)(iii), we will look to ARCO to indemnify [Montana Aluminum Investors Corp.] and CFAC for any expenses from this matter which result from conditions

in existence prior to September 10, 1985.” (Ex. 5; Lucas.) In this letter, CFAC took the position that the Acquisition Agreement’s indemnification obligations extended to pre-1985 environmental liabilities. (Lucas.)

64. On April 12, 1988, Payne, on behalf of CFAC, sent a letter to ARCO, copying Lucas, stating that it was “providing ARCO” with notice “concerning potential Superfund cleanup requirements” at the Site “[i]n accordance with the” Acquisition Agreement. (Ex. 6; Lucas.) Specifically, the letter advised that a consultant with EPA requested information about CFAC’s “waste streams prior to their ‘sampling [of] the plant’” and that EPA was planning a site investigation. (Ex. 6; Lucas.)

65. On April 18, 1988, Don Ryan of CFAC sent a letter to EPA regarding the potential listing of the Site on the National Priority List, stating, “Any liability for these sites would be the responsibility of ARCO.” (Ex. 7; Lucas.)

66. On April 29, 1988, Lucas wrote to Payne to dispute contentions CFAC had made to EPA that all environmental liability for the Site would be ARCO’s responsibility, stating that “[a]ny potential liability on ARCO’s part will depend upon a combination of the factual context as it evolves,” but that he did “not wish to leave an impression that ARCO does not intend to meet its contractual obligations to Montana Aluminum Investors Corp. or that it is, at this point,

disclaiming all responsibility with respect to future enforcement obligations which may be instituted with respect to the Columbia Falls site.” (Ex. 8; Lucas.)

67. On November 29, 1988, Payne again wrote a letter to ARCO, copying Lucas, advising it that pursuant to the Acquisition Agreement, “[Montana Aluminum Investors Corp.] is providing ARCO with notice of EPA activities regarding spent potliner wastes” at the Site and that EPA had now listed SPL from primary aluminum reduction as a hazardous waste. (Ex. 10; Lucas.) Lucas testified that Payne was “once again, giving notice of a possible indemnity claim to [ARCO] based on the spent potliner that [ARCO] may have disposed of at the site.”

68. On August 24, 1990, days before the August 31, 1990 expiration of ARCO’s indemnity, Duker copied Lucas on a letter to ARCO in which CFAC stated it was “making a claim for damages, losses, and out-of-pocket expenses (including attorneys’ fees) caused by or arising out of the Columbia Falls Aluminum Reduction Facility resulting from events or conditions in existence prior to September 10, 1985 relating to environmental hazards which have been identified at the plant site in Columbia Falls.” (Exs. 11, 12; Lucas.)

69. After comparing the indemnity claims that Duker made in his August 24, 1990 letter with CFAC’s complaint in this case, Lucas confirmed that many of the claims concerned the same environmental issues, including cyanide

and fluoride in groundwater, cyanide and fluoride under the Wet Scrubber Sludge Pond (“WSSP”), SPL in the West Landfill, and contamination of the North and South Percolation Ponds. (Lucas; *compare* Ex. 12 with Doc. 1 at ¶¶ 85–87, 99–100, 116–18, 108–12, 130.)

70. On September 14, 1990, Floyd George, on behalf of ARCO, wrote Duker a letter in response to the August 24 indemnification demand. (Ex. 14.) George was the individual tasked with keeping track of divested assets that ARCO had sold in previous years and he was monitoring the CFAC Agreement. (Lucas.) Lucas assisted in drafting this letter for George’s signature. (Lucas.) In that letter, ARCO explained that “[t]o be a claim under the Agreement, it is necessary that by August 31, 1990, CFAC have sustained damages, losses, or out-of-pocket expenses caused by or arising out of an obligation or liability relating to the smelter business resulting from conditions existing as of the time of the sale.” (Ex. 14; Lucas.) Because no such damages were listed in the letter, ARCO asserted that CFAC had no valid claim. (Ex. 14; Lucas.) The letter further explained that:

Such a potential, contingent environmental risk or hazard, even if it were to occur in the future, is not a claim covered within the provisions of Section 10(a).

The indemnity sought by your letter is of an entirely different type than that contained in the [Acquisition] Agreement. Essentially, CFAC is seeking indemnity for all liabilities which might at any time arise out of conditions existing at the site as of the date of sale. This would be a continuing obligation of much broader scope than that bargained for by the parties. It would have required vastly different language in the

indemnifying clause. Instead, what Montana Aluminum Investors Company [sic] received was a limited indemnity designed to protect it during the first five years of operations against losses and other expenses arising out of liabilities and obligations resulting from conditions existing as of the time of sale. This is entirely consistent with the basic nature of the arrangement, whereby ARCO sold the Columbia Falls assets for one dollar. . . .

The items identified in your letter do not constitute claims within the meaning of the Agreement and are not properly chargeable to ARCO under the Agreement. . . .

(Ex. 14: Lucas.) This letter shows that ARCO did not believe certain future environmental contingencies were covered by the indemnification agreement.

71. Nor did ARCO believe that CFAC was going to honor the five-year expiration of the indemnification terms. Das was the environmental manager for ARCO when ARCO sold the CFAC plant and was charged with assessing the potential environmental liabilities that CFAC might assert during the five-year period during which ARCO had promised to indemnify CFAC. (Das.)

72. Das's conversations with his bosses during this time (1988–89) indicated a concern that CFAC would not take the five-year environmental responsibility seriously but would continue to return to ARCO for things it had agreed to forego. Das therefore asked his coworkers to take copious notes regarding all the facts and figures at that time. (Das; *see* Ex. 76.)

73. When ARCO's indemnification obligation expired on August 31, 1990, Das authored a memorandum to ARCO's management advising that: "There

should be a letter written by ARCO to [CFAC] effectively giving notice that the five (5) year obligation on environmental concerns has ended effective August 31, 1990.” (Ex. 75; Das.) Based on the proof presented at trial, no such letter was written despite ARCO’s knowledge of CFAC’s contrary understanding of its rights and obligations under the Agreement.

74. And, unsurprisingly, CFAC continued to make demands after 1990. On several occasions after 1990, CFAC sent letters to ARCO seeking indemnification for environmental issues, for example “the leaching of cyanide into the groundwater from the spent pot liner placed in the landfill.” (Ex. 274 (May 23, 1994); *see also* Ex. 269 (Apr. 8, 1993).) ARCO rejected these indemnification demands for the same reasons articulated in the September 14, 1990 letter. (*See* Exs. 1269, 1270.)

75. Ultimately, however, CFAC did not assert a right to sue ARCO under any theory other than for indemnity under the Acquisition Agreement until the run-up to this lawsuit. To the contrary, when the parties discussed CERCLA or CECRA liability, it was in the context of the non-transferrable liability that the statute authorized regulators to impose rather than a private-party claim. (*See, e.g.*, Ex. 271, at CFAC0442020; Ex. 269.)

iii. Knowledge of Environmental Conditions

76. In addition to the evidence discussed above, documents related to the sale show that both sides were equally aware of the outstanding environmental conditions. For example, the following documents were prepared by the ARCO Divestiture team, under Duker:

a. A 1984 Offering Memorandum, which stated: “Two waste landfills are currently on the facility property. Spent pot linings from the reduction process are the main waste disposed on-site. As a result of the Bevel [sic] Amendment, a mining waste exemption from the Resource Conservation and Recovery Act (RCRA), these spent pot linings are considered non-hazardous.” (Ex. 231 at 15.)

b. A 1984 document titled “Columbia Falls Divestiture Review: Environmental, Safety and Health Summary” stated: “Two on-site landfills are currently in operation: one is a sanitary landfill for non-hazardous wastes; the second is for the disposal of spent cathodes. (Spent cathode materials are likely to receive future classification as hazardous wastes by EPA.) Three closed on-site landfills are present: the first was a sanitary landfill; the second contains spent cathodes; and the third is believed to have been used for the disposal of all plant wastes, possibly including hazardous

wastes. An open, but inactive, calcium fluoride sludge pond is also present.”
(Ex. 1181.)

c. A 1984 Due Diligence Review Report of the operations at the plant conducted by the ARCO Divestiture team found: “One groundwater monitoring well (#TW1) has elevated levels of cyanide and fluoride Two on site landfills are currently in operation The second is for the disposal of spent cathodes from the potlines. This material is currently classified as non-hazardous but is expected to be reclassified as hazardous at some future date There are three closed landfills at the facility . . . the second contains spent cathode materials.” (Ex. 71 at 7–8; Das.)

77. Publicly available documents also described the environmental issues at the Site. For example, the August 10, 1984 public notice of the issuance of the Montana Groundwater Pollution Control System Permit for the Site stated: “The groundwater under the facility may be somewhat contaminated with cyanide and fluoride from historic operations at the site.” (See Ex. 1192 at 10.)

iv. Conclusion

78. The plain language of the Agreement cannot be read as broadly as ARCO insists because waivers of statutory rights must be specific under Montana law. As a result, “claims” as outlined in § 10(a) do not include independent, statutory claims.

79. But even if ARCO's reading were tenable, making the provision ambiguous, the extrinsic evidence shows only that while the parties were both aware of the environmental conditions of the Site and environmental conditions fell within the Agreement, CFAC took every opportunity to attempt to hold ARCO liable *under the terms of the indemnification provision* for the existing environmental conditions at the Site. That evidence does not show that either side intended the Agreement to foreclose all future statutory claims.

80. As a result, ARCO's claimed covenant not to sue does not foreclose the present claims.

2. Assumption of Environmental Liabilities

81. ARCO's second defense is that Section 10(b) shifted liability for pre-closing environmental conditions to CFAC at the time of the sale.

82. In 2019, ARCO sought judgment on the pleadings on the ground that CFAC assumed all environmental liabilities at the Site once ARCO's indemnification obligation expired. (*See* Doc. 34 at 11.) While ARCO correctly argued that such an assumption of liability was permissible under the law, (*see* Doc. 49 at 5–6), it was previously determined that the Agreement was ambiguous concerning whether its reference to costs “relating to the operation and Smelter Business” included environmental liabilities and whether CFAC assumed those liabilities after ARCO's indemnity obligation expired, (*see id.* at 12–14). That

finding meant that extrinsic evidence was necessary to ascertain the intent of the parties. (*Id.* at 15.)

83. Under Montana law, an indemnity agreement is interpreted like any other contract and a court's job "is simply to ascertain and declare what is in terms or in substance contained therein, not to insert what has been omitted or to omit what has been inserted." *Ohio Farmers Ins. Co.*, 386 P.3d at 616 (quoting Mont. Code Ann. § 1-4-101). "To the extent that there is ambiguity, indemnity clauses generally should be liberally construed in favor of the party intended to be indemnified." *A.M. Welles, Inc.*, 342 P.3d at 989 (internal quotation marks omitted).

84. As shown above, the evidence confirms the parties intended the indemnity provisions in Article 10 of the Acquisition Agreement to cover environmental liabilities. The remaining question is whether the parties also intended to shift all liability for environmental conditions that existed at the time of the sale but resulted in damages, losses, and out-of-pocket expenses to CFAC after August 31, 1990.

85. Neither ARCO nor CFAC presented extrinsic evidence on this point. But, contrary to ARCO's position, that absence weighs in favor of CFAC. As explained in this Court's previous order, despite Montana's admonition to liberally construe indemnification provisions, *see A.M. Wells, Inc.*, 342 P.3d at 989, a party

cannot assume CERCLA liability passively; either the contract must specifically provide for such an assumption or it must be so broad as to leave no question as to that assumption. This Agreement does neither. To the contrary the evidence shows that there was extensive correspondence between ARCO and Montana Aluminum Investors Corp. (via Duker) in 1985 that evaluated a variety of costs, liabilities, and savings under both a shutdown/liquidation scenario and the terms of Duker's offer; however, that correspondence made no mention whatsoever of existing, future, or contingent environmental liabilities. (*See Exs. 112, 237, 238, 240, 241, 242, 243, 849.*)

86. Moreover, in 1985, ARCO was a sophisticated party and the subject of several CERCLA lawsuits, including at least one in Montana, and had also been deemed a CERCLA potentially responsible party ("PRP") at 24 sites by EPA and/or individual states. (*See Ex. 1017 at ARC-00005652-53.*)

87. While the evidence shows both parties were aware of the environmental conditions at the Site, neither the plain language of the Agreement nor the parties' conduct shows that they intended for CFAC to assume all the environmental liabilities for the Site as part of its post-closing operations.

3. Conclusion

88. Because neither the language of the Agreement nor the parties' intent as distilled from extrinsic evidence shows that CFAC agreed to forego a CERCLA

claim related to environmental conditions or assumed all such liability, resolution on the merits can proceed. Nevertheless, the circumstances surrounding the 1985 Agreement support allocating the greater cleanup responsibility to CFAC.

IV. SITE OVERVIEW

A. Waste Streams

89. Several different waste streams were created during the course of aluminum production at the Site. Approximately 40 chemicals were identified as contaminants of potential concern. (Ex. 134 at 25.)² Of primary concern here are cyanide and fluoride in the groundwater, (Ex. 134 at 25–26), as well as polycyclic hydrocarbons (“PAHs”) and polychlorinated biphenyls (“PCBs”) in the soils, (Ex. 134 at 27–28). (*See also* Ex. 868 at 33–39.)

90. Cyanide, fluoride, arsenic, and PAHs are each “hazardous substances” pursuant to 42 U.S.C. § 9601(14). (Agreed COL ¶ 6.)

1. Spent Potliners (“SPL”)

91. Over the lifetime of an aluminum pot, sodium in the cryolite bath gradually penetrated the potliner in the pots, causing the carbon to swell and eventually fail. Periodically, a pot was taken out of production and the spent

² At the time the parties filed their proposed findings of fact and conclusions of law, the Final Feasibility Study had not yet been approved. (*See* Ex. 868.) As a result, many of the citations in their proposed findings are to the Remedial Investigation Report. The findings in the two documents are, with minor exception, consistent with one another.

potliner (“SPL”) was removed from its steel shell and insulating brick layer and replaced with a new carbon lining. (Agreed ¶ 13; Ex. 134 at 45–46.)

92. The SPL consisted of a thick layer of carbon bonded to an insulating brick layer that had become contaminated with cyanide, fluoride, sodium, and aluminum by the time of its removal. The fluoride and sodium in the SPL came from the sodium fluoride (cryolite) bath, and the cyanide formed in the cathode as a side chemical reaction during aluminum production. (Agreed ¶ 14; Ex. 134 at 45–46.) When exposed to rainwater, the cyanide and fluoride in the SPL can leach into the groundwater. (Baris.)

93. EPA first proposed SPL for listing as a hazardous waste pursuant to the federal Resource Conservation and Recovery Act, 42 U.S.C. §§ 6901 *et seq.* (“RCRA”) in 1980, but before that listing became effective EPA suspended the listing of SPL because it determined SPL was excluded from regulation under the recently enacted Solid Waste Disposal Act Amendments of 1980. (Ex. 855.) EPA then relisted SPL as a hazardous waste in September 1988, (Ex. 1271), which became effective in Montana when the State of Montana classified SPL as K088 hazardous waste under RCRA, effective March 15, 1991, (*see* Ex. 258). (Agreed ¶ 15.)

94. Between approximately 1960 through approximately 1980, ARCO disposed of between 129,000 and 135,000 tons of SPL in two unlined landfills: the

West and Center Landfills. (Baris; Ex. 90; Ex. 226 at 2.) Both ARCO and CFAC also disposed of SPL in a lined landfill, the East Landfill, from 1980 to 1990. (See Ex. 275 at 2.) After 1990, SPL was shipped off-Site for disposal. (Baris; Ex. 134 at 46; *see also* Exs. 254, 255.)

95. SPL at the Site was sampled at various times. Samples taken during ARCO's tenure in 1980 showed 36 milligrams per liter (mg/L) of cyanide in pot bottoms from a landfill, 16 mg/L of cyanide in SPL from a carbon pile face, and 0.42 mg/L of cyanide in crushed pot bottom extract. (Ex. 126 at 67.) During CFAC's tenure, samples of "typical" SPL at the Site were taken in January 1988 and March 1992 which were found to contain 0.1 percent cyanide and 16 percent fluoride. (Exs. 249, 261; Baris.)

2. Wet Scrubber Sludge

96. Operations of the aluminum reduction pots generated air emissions containing fluoride, PAHs, and other contaminants. For example, PAHs associated with the electrolytic process would migrate out from the potline building into the atmosphere. From there, they would disperse across the Site and be deposited on soil. ARCO controlled emissions from potlines using wet scrubbers until the late 1970s, when it replaced them with dry scrubbers. (Baris; Ex. 134 at 46.) Unlike with the wet scrubbers, residue from the dry scrubbers was recycled back into the aluminum reduction process. (Ex. 1177 at ARC-00002803.)

97. It is not possible to distinguish between PAHs produced during either the ARCO or CFAC period. (Baris).

98. ARCO landfilled the sludge generated from its wet scrubbers at the Wet Scrubber Sludge Pond (“WSSP”). An analysis of the sludge indicated that it contained approximately 80 percent calcium fluoride on a dry-weight basis, and also contained calcium oxide, magnesium oxide, sodium oxide, and iron oxide. (Agreed ¶ 16; Ex. 134 at 46.) ARCO disposed of sludge from approximately 1955 until 1977, when the wet scrubbers were decommissioned. (Wright.) ARCO did not dispose of SPL in the WSSP. (Wright.)

3. Soaking Pits

99. Between approximately 1964 and 1977, as part of its SPL removal process, ARCO constructed pits at the Site at the northern end of the Main Plant Area in which it placed spent pots and filled them with water to help loosen and release the SPL (holding each pot for about 8 hours to also cool them). Water used to release the liner, which became contaminated with cyanide and fluoride, was drained to the Northeast and Northwest Percolation Ponds (“North Percolation Ponds”). (Exs. 122A, 122B, 814, 815, 827; *see also* Ex. 250 at 16.)

100. ARCO processed an estimated 1,800 pots through the soaking pits, using about 100,000 gallons of water for each pot. As a result, roughly 180 million gallons of water passed through the soaking pits to the North Percolation Ponds

during their approximately 14 years of operation. (Ex. 815; *see also* Ex. 260 at 22.)

101. This water contained hazardous substances including cyanide, fluoride, and PAHs. Given attenuation and groundwater flows, however, the water ARCO disposed of in the North Percolation Ponds is no longer contributing cyanide and fluoride to the groundwater today. (Baris; Otis.)

4. Other Wastes

102. Besides the SPL and the wet scrubber sludge, operations at the Site resulted in the generation of a variety of wastes which were disposed of at different areas, including the North Percolation Ponds, the Industrial Landfill, the Asbestos Landfills, Soils North of Main Plant Building and immediately adjacent to the landfills, and the South Percolation Ponds. Additionally, drummed liquid wastes were stored in the Former Drum Storage Area prior to offsite shipment and disposal. (Agreed ¶ 17; Ex. 134 at 28–30.)

103. Liquid waste generated as a result of the aluminum reduction process and stormwater were discharged to the North Percolation Ponds. (Agreed ¶ 18; Ex. 134 at 46.)

104. Throughout the Site's operations, landfills at the Site were used to dispose of plant wastes, including aluminum dross, solvents, potliner refractory wastes (non-hazardous)—likely the scrap calcined petroleum coke, ore, cryolite

(including aluminum fluoride), brick, concrete, scrap metal, wood, used oil, and plant trash and other municipal solid waste. (Ex. 134 at 46.) Additionally, spills sometimes occurred during the transportation and transfer of industrial material for use at the facility, and of waste products. (Williams; Batson.)

5. Technological Advancements

105. ARCO made several upgrades to the facility between 1977 and 1981 that improved its environmental performance.

106. In 1980, ARCO completed a major capital expenditure program at the facility, at a cost of \$32 million, to reduce fluoride emissions to meet revised emissions standards, and it made an additional capital expenditure of \$5 million for the installation of a dry scrubbing system to maintain compliance with the standards. (Williams: Ex. 231.)

107. ARCO also completed the installation of Sumitomo process technology at the aluminum reduction plant in 1981 at a cost of approximately \$42 million, which substantially reduced air emissions and power consumption, improved materials handling, and reduced the volume of SPL generated by the facility. (Williams; Ex. 1177 at ARC-00002803; Ex. 18 at 9; *see also* Exs. 221, 222, 224, 225, 228.)

6. Permitted Discharges

108. During historical facility operations, wastewater generated because of the aluminum reduction process was discharged to several surface impoundments at the Site, from which it then discharged indirectly to groundwater. These discharges were undertaken in accordance with several permits issued by the Montana Department of Health and Environmental Sciences (“MDHES”), subsequently renamed the Montana Department of Environmental Quality (“MDEQ”). (Wright.)

109. ARCO applied for a groundwater discharge permit sometime in or before May 1983. (*See* Ex. 825.) MDHES inquired about the source of “elevated cyanide and fluoride levels in some of the test wells,” (Ex. 826), and was informed it was likely from the “past practice” of discharging pot soaking to the North Percolation Ponds, (Ex. 827).

110. On September 17, 1984, MDHES issued Ground Water Pollution Control System Permit Number MGWPCS-0005 to ARCO, allowing certain discharges to the surface impoundments and indirectly to groundwater, prohibiting degradation of groundwater beyond the property boundary, and requiring, among other things, submission of a hydrogeologic report within one year that would summarize groundwater conditions at the Site and make recommendations regarding the existing monitoring system and continuing management of wastes

present at the Site. (Ex. 1218; Ex. 134 at 46; *see also* Ex. 250 at 16.) Related to this permit and discussed in more detail below, both parties discharged leachate onto the WSSP during their respective tenures. ARCO did so twice, and CFAC did so three times.

111. In 1993, CFAC applied for a Montana Pollutant Discharge Elimination System (“MPDES”) permit for the groundwater contaminated by historical SPL disposal practices, released via a seep to the Flathead River. On May 1, 1994 MDHES issued Permit No. MT-0030066, which authorized process wastewater discharges to specified receiving ponds and to groundwater. The permit included specific conditions requiring CFAC to cap the West Landfill and investigate Site hydrology to track the cyanide concentrations in groundwater from the landfill to the Flathead River. (Wright; Ex. 272; Ex. 134 at 46.) CFAC placed a synthetic cap on the West Landfill and continued to track cyanide concentrations in groundwater. (Wright; Ex. 134 at 52; Ex. 275.)

112. Permit No. MT-0030066 was reissued in 1999, (Exs. 272, 273), and terminated in 2019, (Wright; Ex. 285).

113. Related to the 1999 permit, in August 1991, MDEQ performed a groundwater inspection at the Site, which concluded that groundwater was contaminated and that elevated levels of cyanide were present in the seeps that were discharging from the Site into the Flathead River, which MDEQ determined

was an unauthorized discharge of pollutants by CFAC. (Ex 62 at 1; Wright.)

While CFAC agreed to increase monitoring and install new sampling wells, those seeps remained active. As a result, on December 4, 1996, EPA issued a Notice of Violation to CFAC for violation of Section 301(a) of the federal Clean Water Act for the unauthorized discharge of cyanide-contaminated seepage from the Site into the Flathead River. (Ex. 64; Wright.) And, on January 13, 1997, MDEQ issued a Notice of Violation to CFAC for violation of the Montana Water Quality Act, Mont. Code Ann. § 75-5-605, for the unpermitted discharge of industrial waste to the Flathead River. (Ex. 64; Wright.) Instead of addressing the cyanide-contaminated seeps, CFAC requested and obtained permission from MDEQ to modify its MPDES permit to allow for a “mixing zone” in the Flathead River, wherein MDEQ would allow cyanide concentrations in the Flathead River to exceed State water quality standards as a result of the discharge of cyanide-contaminated seepage from the CFAC Site. (Ex. 1242; Wright.)

114. On July 25, 2014, MDEQ issued a revised MDPES permit to CFAC that effectively eliminated the mixing zone that would have allowed CFAC’s exceedances of the cyanide water quality standard in the Flathead River to continue (Ex. 66 at ¶ 125–27; Wright.) CFAC appealed, but the permit was terminated on April 17, 2019 because of the closure of the facility. (Ex. 217;

Wright.) However, the discharge of cyanide-contaminated seepage from the Site into the Flathead River continues today. (Wright.)

B. Site Conditions

115. There are eleven Site-specific areas at issue:

Site Area	User: Years of Operation	Construction	Use / Type of Waste
West Landfill	ARCO: approx. 1960-1980	Unlined bottom Earthen cap 1981 Clay cap 1992 Synthetic cap 1994	Used for disposal of: SPL (1960-1970) Sanitary, municipal solid waste, scrap (steel, wood, strapping, scrap from shops)
Center Landfill	ARCO: approx. 1970-1980	Unlined bottom Clay cap 1980	Used for disposal of SPL, sanitary, scrap from shops
East Landfill	ARCO: 1980-1985 CFAC: 1985-1990	Clay liner bottom Clay cap & synthetic cap 1990	Used for disposal of SPL (1980-1990)
Wet Scrubber Sludge Pond ("WSSP")	ARCO: approx. 1955-1979; discrete disposal events between 1983-1984 CFAC: discrete disposal events between 1987-1994	Unlined bottom Earthen cap 1981	Used for disposal of: calcium fluoride wet scrubber sludge (approx. 1955-1979); leachate (1983, 1984, 1987, 1989, 1994); pot diggings (1993-1994, partially excavated 1998)
Former Drum Storage Area	ARCO: approx. 1980-1985 CFAC: 1985-unknown (before 1996)	Earthen unlined storage pad	Used as storage area for drums of RCRA-listed wastes for shipment offsite

South Percolation Ponds	ARCO: 1955-1985 CFAC: 1985-2009	Unlined bottom	Used to receive wastewater from: sewage treatment, cooling of equipment
Northeast Percolation Ponds	ARCO: 1955-1985 CFAC: 1985-2009	Unlined bottom	Used to receive wastewater from operations in Main Plant Area, including water from SPL soaking operations (1964-1977)
Northwest Percolation Ponds	ARCO: 1970s-1985 CFAC: 1985-2009	Assumed unlined bottom	Used to receive wastewater from operations in Main Plant Area, including water from SPL soaking operations (1964-1977)
Soils North of Main Plant Building	ARCO: 1955-1985 CFAC: 1985-2009	(Soils near operations area; not an intended disposal area)	Used as facility operations area (no intentional disposal)
Industrial Landfill	ARCO: 1980-1985 CFAC: 1985-2009	Assumed unlined bottom Closed 2009	Used for disposal of: scrap metal, wood, municipal solid waste
Asbestos Landfills (North & South)	ARCO: late 1970s-1985 CFAC: 1985-2009	Assumed unlined bottom Closed 2009 (earthen cap)	Used for disposal of: asbestos

(Ex. 868 at 76.) These individual areas are discussed in more detail below.

1. West Landfill

116. The West Landfill is located in the northern portion of the Site, north of and adjacent to the WSSP:



(Agreed ¶ 27; Ex. 848 at 7; *see also* Ex. 134 at 304.)

117. The West Landfill comprises approximately 7.8 acres, with areal dimensions of approximately 615 feet by 600 feet. (Agreed ¶ 28; Ex. 868 at 21.)

The landfill is unlined, extends approximately 15 to 22 feet below surrounding grade and rises approximately 13 to 20 feet above grade. (Ex. 868 at 21.)

Impacted soil beneath the landfill, however, could be as thick as 115 feet. (*See* Ex. 868 at 21.)

118. Groundwater levels around the West Landfill range from approximately 36 feet to 87 feet below surrounding grade. (Ex. 868 at 21.)

119. The West Landfill was used to dispose of SPL and other wastes (sanitary, industrial, and reportedly solvents) through 1980, (Agreed ¶ 29), although SPL disposal reportedly ended in 1970, (Ex. 134 at 52). The landfill was closed in 1981 with a clay cap and a synthetic cap was added in accordance with CFAC's MPDES Permit No. MT-0030066 in 1994. (Baris; Ex. 134 at 52; Ex. 868 at 21; Ex. 272.)

120. By June 11, 1980, ARCO had disposed of approximately 61,800 tons of SPL (carbon plus refractory) in the West Landfill. (Baris; Ex. 226 at 2.) And, as of July 1980, detectable amounts of cyanide and fluoride had traveled from the SPL in the West Landfill into underlying soils. (*See* Ex. 1081 at 44.)

121. By April 22, 1981, ARCO had disposed of approximately 68,000 tons of "total material" in the West Landfill, including 410 tons of cyanide and 13,000 tons of sodium fluoride. (Baris, Ex. 90.)

122. Although no soil or groundwater samples have been collected beneath the West Landfill, the long-term persistence of cyanide in groundwater directly downgradient of the landfill coupled with a low-permeability cap in place since 1994 indicates that impacted material likely extends into and beneath the seasonal high-water table and is serving as a continuing source of contamination. (Baris; Ex. 868 at 22.) This is discussed in more detail in the "Groundwater" section.

123. EPA has indicated that it is not feasible to either leave the West Landfill as is or simply upgrade the cap. (Baris.) Rather, the Final Feasibility Study Report recommends a range of alternatives from the construction of a slurry wall to excavation of the landfill with onsite consolidation. (Ex. 868 at 150.)

2. Wet Scrubber Sludge Pond (“WSSP”)

124. The WSSP is located directly south of and adjacent to the West Landfill. (Agreed ¶ 30; Ex. 134 at 304.)

125. The WSSP is approximately 10.8 acres in size with areal dimensions of approximately 750 feet by 580 feet. (Agreed ¶ 31; Ex. 134 at 52.) The total depth of the waste material is approximately 30 feet, half of which is above grade. (Ex. 868 at 22.) Groundwater levels beneath the WSSP range from 60 to 105 feet below grade. (Ex. 868 at 22.)

126. The WSSP received waste material from the wet scrubbers under ARCO from 1955 to 1980, when they were replaced with dry scrubbers that produced less waste. (Baris; Otis; Wright; Ex. 134 at 139.) During this period, ARCO disposed of an estimated 450,000 cubic yards of calcium fluoride sludge or wet scrubber sludge in the WSSP. (Baris; Ex. 88 at 7.)

127. This calcium fluoride sludge contained fluoride but did not contain cyanide. (Wright.) Specifically, the sludge was approximately 80 percent calcium fluoride (CaF_2) on a dry weight basis, with small amounts of calcium oxide (CaO),

magnesium oxide (MgO), sodium oxide (Na₂O), and iron oxide (Fe₂O₃). (Ex. 134 at 139.)

128. The WSSP is unlined, (Baris), but was capped with an earthen cap in 1981 and revegetated, (Ex. 868 at 22).

129. Aside from the sludge disposed of by ARCO, two other types of disposals into the WSSP implicate future cleanup costs. First, both ARCO and CFAC transferred leachate to the WSSP at discrete times to prevent overflow of the Leachate Ponds. Second, CFAC disposed of pot digging into the WSSP in 1993 or 1994. These discharges are discussed in more detail below.

i. Leachate

130. SPL contains cyanide and fluoride, which, when exposed to rainwater, can generate “leachate” containing those constituents that can then migrate into other surface or groundwater. (Baris.)

131. After construction and expansion of the East Landfill and its associated Leachate Ponds in 1980–82, ARCO discovered that, despite their capacity of 900,000 gallons, heavy seasonal precipitation could cause the Leachate Ponds to overflow. (Baris; Ex. 89 at 2.) To avoid contamination of the groundwater during an overflow, transfer of the extra leachate to the WSSP was viewed as a more environmentally sound option. (Baris.)

132. Evidence suggests that ARCO disposed of excess leachate this way at least twice, likely in 1983 and 1984. (Baris; Exs. 99, 102; *see also* Exs. 51, 840; Ex. 89 at 2.) Documents conflict as to whether these leachate disposal events totaled 800,000 gallons of leachate each time, (Ex. 99 at 12), or totaled 80,000 gallons on one occasion and 80,000 or 100,000 gallons on the other, (Ex. 102). There is no trial witness with personal knowledge of the 1983 or 1984 leachate disposal events. (Wright.)

133. ARCO did not inform the State of Montana about its leachate disposals. But CFAC disclosed them to MDHES, in November 1985, approximately two months after CFAC acquired the facility. (Ex. 99 at 1.)

134. CFAC disposed of excess leachate into the WSSP on three occasions: 1987, 1989, and 1994. The 1987 disposal involved approximately 400,000 gallons with a cyanide contamination level of 0.479 mg/L, (Exs. 52, 53), the 1989 disposal involved approximately 150,000 gallons with a cyanide contamination of 3 mg/L, (Ex. 56 at 1), and the 1994 disposal involved approximately 400-500,000 gallons with a cyanide contamination of 0.44 mg/L, (Ex. 57 at 1). CFAC received MDEQ approval for all three discharges. (Wright; *but see* Williams (opining that 1994 disposal was not properly authorized).)

135. Both ARCO and CFAC used methods to reduce contamination, such as aeration, bleach, and UV. (Williams; Wright.) Percolation of the leachate

through the calcium fluoride sludge was also effective in reducing both cyanide and fluoride concentrations in the leachate disposed of by both parties. (Baris; *see* Ex. 54.)

ii. Pot Diggings

136. Around 1993 or 1994, CFAC conducted an experiment to improve pot operation, which involved opening approximately 120 of the facility's 600 pots to remove "muck" consisting of undissolved alumina ore and anode carbon dust. (Baris; Ex. 58 at 4.) CFAC then planned to "reuse" material dug out from the pots. (Baris.) Other than these specific pots, during this period CFAC was sending its SPL off-Site for disposal. (Wright.)

137. In this process, a backhoe was used to remove the material from the pots and some of the pot diggings material (clean cryolite bath) was recycled back into the pots. Pot digging material that could not be re-used at the time was transported to the closed WSSP. (Ex. 58 at 4.) These materials, however, were not supposed to contain SPL as pot diggings are not generally considered hazardous. CFAC did not put a liner under the pot diggings when they were placed, nor did CFAC put a cover on the diggings. (Wright.) This experiment was abandoned after digging 120 pots when it was determined the improvements in pot operations did not justify the efforts. (Wright.)

138. On November 12, 1997, CFAC personnel discovered pieces of carbon in the pot diggings material, which upon closer inspection was found to contain both anode carbon and cathode carbon. CFAC investigated the origin of the carbon and concluded that, although care was used when digging the pots, the backhoe inadvertently removed pieces of cathode carbon pot liner along with the muck. (Wright; Ex. 58 at 4.)

139. The next day, November 13, 1997, CFAC reported its discovery of the cathode carbon to MDEQ. (Ex. 58 at 5.) CFAC paid a fine and was given a violation. (Wright.)

140. Sampling results indicated that total cyanide content of the cathode carbon was below the detectable limit of 0.05 mg/L. CFAC estimated the size of the total pot diggings material to be 1,800 cubic yards. However, the carbon material deemed by MDEQ to meet the definition of K088 SPL, a listed hazardous waste, was estimated to have a volume of between four and six cubic yards and a total weight of 14,340 lbs. (Baris; Wright; Ex. 58 at 5.)

141. On February 23, 1998, in coordination with MDEQ, CFAC began excavating the carbon material from the pot diggings, completing the excavation on April 16, 1998, and notifying MDEQ of completion. (Baris; Ex. 58 at 5.)

142. Results of cyanide sampling at the pot diggings location around the time of the carbon excavation ranged from a “non-detect” result to a maximum of

2.1 milligrams per kilogram. (Baris; Exs. 58, 59, 60.) These cyanide concentrations are consistent with concentrations in soil across the Site that did not have any contamination. (Baris.) MDEQ did not request analysis of fluoride levels. (Baris.)

143. On October 14, 1998, MDEQ—in correspondence copying EPA— notified CFAC and EPA that “the State will require no further clean-up action for the waste pile material or soil under the pile.” (Ex. 60; Baris.)

3. Center Landfill

144. The Center Landfill is located east of the West Landfill, south of the Sanitary Landfill, and west of the East Landfill. (Agreed ¶ 32; Ex. 134 at 304.) The Center Landfill is unlined. (Baris.)

145. The Center Landfill is approximately 1.8 acres in area, in a circular shape, with a diameter of approximately 330 feet. The Center Landfill was historically referred to as the carbon mound or carbon pile. The landfill was constructed above grade and is approximately 15 feet above surrounding grade. The geophysical survey indicates an approximate thickness between 15 and 30 feet of landfill material. Groundwater levels around the Center Landfill range from approximately 57 feet to 139 feet below surrounding grade. (Ex. 868 at 22.)

146. By 1980, according to internal ARCO records, ARCO had disposed of approximately 67,200 tons of SPL at the unlined, uncapped Center Landfill. (Ex. 226 at 2; *see also* Ex. 90.)

147. Around 1980, concurrent with or shortly after construction of the East Landfill, a clay cap was placed on the Center Landfill, as was approximately 18 inches of till. (Agreed ¶ 33; Ex. 134 at 53.)

148. Although not a primary source, the Center Landfill is considered a secondary source of cyanide and fluoride contamination of the groundwater. (Ex. 134 at 30; Ex. 868 at 56.)

4. East Landfill

149. The East Landfill is located on the northeastern border of the Superfund site, directly East of the Cedar Creek Reservoir Overflow Ditch. It was built along with, and sits between, the lined North Leachate and South Leachate Ponds. (Agreed ¶ 38; Ex. 868 at 23.)

150. The East Landfill encompasses approximately 2.4 acres and is 330 feet by 730 feet. (Ex. 868 at 23.) It is approximately 30 feet above grade, with an approximated depth of 40 feet. (Ex. 868 at 23.) Groundwater levels around the East Landfill are approximately 109 to 130 feet below grade. (Ex. 868 at 23.)

151. The East Landfill was built with a clay liner and capped with a 6-inch clay layer, a synthetic cap, and an 18-inch vegetated cover. (Baris, Ex. 868 at 23.)

152. The East Landfill was operated from 1980 to 1990 for disposal of SPL. (Ex. 134 at 53.) Both ARCO and CFAC each disposed of SPL at this location for approximately five years and it is estimated that the volume of SPL in the landfill totaled approximately 65,042 tons. (Ex. 275 at 2.)

153. However, unlike the other two landfills where SPL was historically disposed (the West and Center Landfills), the East Landfill is not a contributing source to cyanide and fluoride in groundwater. (Baris.) The cyanide and fluoride concentrations in groundwater to the east and northeast of the West Landfill and WSSP, and immediately downgradient of the East Landfill, Leachate Ponds, and Sanitary Landfill, are generally orders of magnitude lower than those downgradient of the West Landfill and WSSP. (Agreed ¶ 39; Ex. 134 at 140.)

154. For example, the maximum cyanide and fluoride concentrations in groundwater immediately downgradient of the East Landfill were 203 $\mu\text{g}/\text{L}^3$ and 736 $\mu\text{g}/\text{L}$, respectively, both in monitoring well CFMW-023. Immediately downgradient of the West Landfill and WSSP, cyanide concentrations ranged from 2,060 $\mu\text{g}/\text{L}$ to 11,500 $\mu\text{g}/\text{L}$ and fluoride concentrations ranged from 4,110 $\mu\text{g}/\text{L}$ to 55,300 $\mu\text{g}/\text{L}$. (Ex. 134 at 140–41.)

155. The East Landfill was also built with two lined leachate collection ponds. (Ex. 868 at 23.)

³ Micrograms per liter.

156. The North Leachate Pond is approximately 0.6 acres in size and has a Hypalon liner. This pond received stormwater runoff and leachate from the East Landfill and was hydraulically connected to the WSSP by a drainage pipe. The pond was aerated to reduce concentrations of cyanide and then closed in 1994. (Ex. 868 at 23.)

157. The South Leachate Pond is approximately 0.9 acres in size and was also constructed to receive stormwater runoff and leachate from the East Landfill. It was also hydraulically connected to the WSSP. The pond was aerated to reduce concentrations of cyanide and then emptied in 1990 and dried, capped, and closed in 1993. (Ex. 868 at 23.)

5. Industrial Landfill

158. The Industrial Landfill is an inactive, uncovered landfill of unknown depth located in the northern portion of the Site, northwest of the West Landfill and North Asbestos Landfills. (Baris; Agreed ¶ 44.) It encompasses approximately 12.4 acres. (Ex. 868 at 23.)

159. Based on aerial photography, the Industrial Landfill began operations in the 1980s and received non-hazardous waste and debris until landfilling operations ceased in October 2009. (Ex. 868 at 23.)

160. The Industrial Landfill is contaminated with PAHs. (Ex. 134 at 141.) Although the Industrial Landfill may potentially be contributing to the PAH

detections in groundwater at the Site, fluoride and cyanide concentration levels immediately downgradient of the Industrial Landfill indicate that it is not a significant contributing source to the cyanide and fluoride in groundwater at the Site. (Baris; Ex. 134 at 141.)

161. The Industrial Landfill has been identified as a potential remediation location to place other on-site soils after excavation. (Baris.)

6. Asbestos Landfill

162. Two areas within the Site were identified as being former asbestos landfills: one north of the West Landfill and one south of the East Landfill. They were constructed in the late 1970s or early 1980s and were used from 1993 to 2009. There is evidence of an engineered cap or liner. (Ex. 868 at 24.)

163. Superficial sampling of surface soils shows “there is no potential exposure for asbestos by human receptor activity in the area.” (Ex. 134 at 141.) However, soil-disturbing activities may expose asbestos. (Ex. 134 at 141.)

7. Former Drum Storage Area

164. The Former Drum Storage Area was 250 feet by 200 feet and located west of the WSSP.⁴ (Ex. 209 at 63.)

⁴ A smaller size of 60 square feet was discussed at trial. (See testimony of Williams). The discrepancy may be attributed to the difference in size between the area overall and the size of the paved asphalt pad.

165. The Former Drum Storage Area was used for the temporary storage of drums of RCRA-listed hazardous substances, primarily spent solvents, for shipment offsite beginning in 1980. (Agreed ¶ 42; Ex. 209 at 63.) There is no indication that SPL was ever stored in this area. (Baris.) This area was no longer used by 1996. (Agreed ¶ 43; Ex. 1251 at 20.)

166. The surface soil of the Former Drum Storage Area is contaminated with PAHs, metals, cyanide, and fluoride. (Agreed ¶ 41.) However, the decrease in concentration with depth and the absence of any observed waste materials suggest that this area is not a primary contributor to groundwater contamination. (Ex 868 at 56; Baris.) The cyanide concentration levels in the soil briefly peaks approximately 0.5 to 2 feet below surface level before dropping off. (Baris.)

167. Potential remediation would require only the excavation and removal of soil to other onsite locations, such as the Industrial Landfill. (Baris.)

8. Soil North of Main Plant Buildings

168. The Main Plant Area is where manufacturing historically took place at the Site, and includes the former Main Plant Building (*i.e.*, former potline buildings), the former Paste Plant building, various areas where waste and raw materials were stored and handled during historical Site operations, the plant drainage system, and various underground/aboveground storage tanks located on the north side of the Main Plant. (Agreed ¶ 45; Ex. 134 at 137–38.) Although the

various waste streams from Site operations were disposed in the landfills and percolation ponds, releases of raw materials or wastes resulted in impacts to soils throughout the Main Plant Area. (Ex. 134 at 137.)

169. The Main Plant Area was used first by ARCO, then by CFAC, during the facility's years of operation from 1955–2009. There are various contaminants of concern in the soils in the Main Plant Area, (Agreed ¶ 46; Ex. 134 at 29), such as PAHs, cyanide, and fluoride. (Ex. 134 at 136–37.) However, the Main Plant Soils are not considered a significant source of cyanide and fluoride in the groundwater. (Ex. 134 at 29.)

9. North Percolation Ponds

170. The North Percolation Ponds are comprised of two ponds connected by a ditch. The Northeast Percolation Pond, constructed in 1955, is located near the center of the Site and connected to the Northwest Percolation Pond by an effluent ditch to the West:



(Agreed ¶ 34; Ex. 848 at 10.)

171. The Northeast Percolation Pond is approximately 2 acres in size. It received discharges from various operations within the Main Plant Area until manufacturing ceased in 2009. It is currently operational as a discharge point for stormwater drainage. (Agreed ¶ 35; Ex. 868 at 24.)

172. The Northwest Percolation Pond is connected to the west side of the Northeast Percolation Pond by an unlined drainage ditch and was constructed around 1972 to receive overflow water from the Northeast Pond. This pond is approximately 8 acres in size. (Agreed ¶ 36; Ex. 868 at 24.) The Northwest Percolation pond is unlined. (Baris.)

173. The results of the Remedial Investigation indicate that the Northeast Percolation Pond and its influent ditch typically contained among the highest

concentrations of PAHs in sediment, followed by the effluent ditch and the Northwest Percolation Pond. (Ex. 134 at 185.)

174. The high cyanide and PAH concentrations in sediment correspond to a surficial layer of highly viscous to solid black carbonaceous material that exists across the majority of the Northeast Percolation Pond, and intermittently across the ditches and Northwest Percolation Pond. However, soil samples gathered around the perimeter of the ponds confirms the impacts are confined to within the footprint of the ponds and the ditch. (Agreed ¶ 37; Ex. 134 at 142.)

175. Although cyanide was detected beneath the North Percolation Ponds, the concentration decreases with increasing depth. This indicates that the ponds—which are located downgradient of the West Landfill and WSSP—are not themselves a continuing significant source of groundwater cyanide and/or fluoride concentrations. (Baris; Ex. 134 at 142.)

176. The highest-ranked remedial alternative would require excavation of the contaminated sediments and placing them in the WSSP and then capping the WSSP. Overall, there are approximately 35,000 cubic yards of sediment that would need to be excavated. (Baris.)

10. Groundwater

177. An October 15, 1980 report by Hydrometrics Inc.—commissioned by ARCO to evaluate possible site locations for a new waste disposal at the Site in

light of new hazardous-waste regulations—determined that water bearing zones beneath the plant are recharged in part by infiltration of water from precipitation, and discharge to wells and to the Flathead River, and that soils beneath the plant were highly variable, with occurrences of permeable gravels and cobbles. (Ex. 126 at 14, 51, 65.)

178. The Report found that two samples of exposed SPL at the landfills contained 36 and 16 parts per million (“ppm”) of cyanide, that “crushed pot bottom extract” contained 0.42 ppm of cyanide, and that the differences in reported total cyanide concentrations between the samples “is attributed to non-uniform contamination of the spent pot liners with cyanide.” (Ex. 126 at 48, 67.)

179. The Report concluded that “significant concentrations of cyanide and fluoride detected in the shallow groundwater” and “[e]levated concentrations of both cyanide and fluoride are indicated in Production Wells No. 6 and 7. The source of the contamination may be the cooling water ponds, contaminated groundwater which is migrating from the plant site to the river, or a combination of the two.” (Ex. 126 at 7, 61.)

180. Nevertheless, a 1985 Hydrometrics Report concluded that “[b]ased on quarterly groundwater sampling and analysis by ARCO staff, the plant has had limited effects on area groundwater and surface water quality.” (Ex. 1081 at CFAC-00008949.) That report also stated that “[p]resent waste management

practices were developed to minimize environmental impacts;” and “[m]onitoring to date indicates this objective is being achieved.” (Ex. 1081 at CFAC-00009002.)

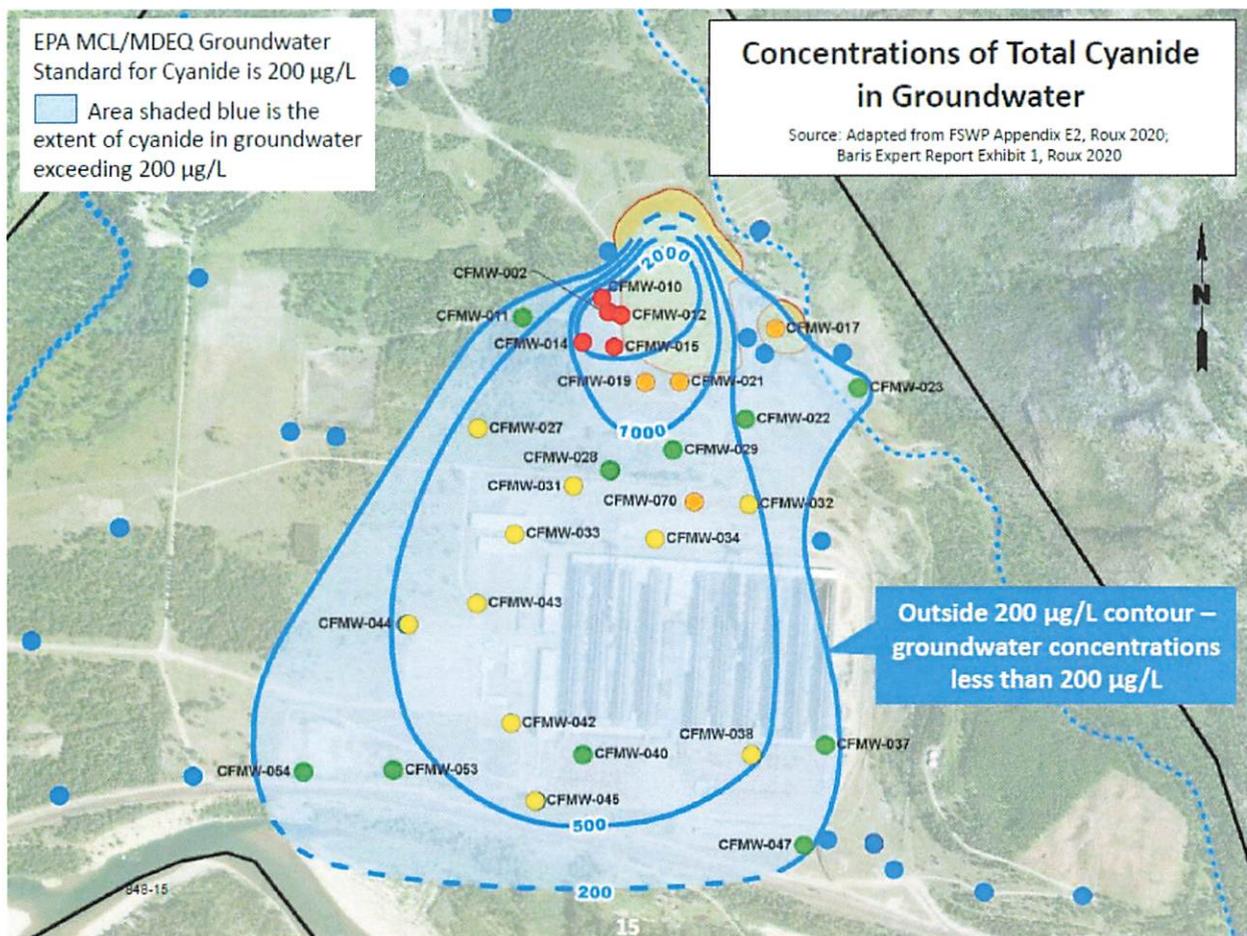
181. In June 1986, MDEQ’s Water Quality Bureau informed CFAC that an expanded groundwater monitoring program was needed to determine the impacts of past and current waste handling practices at the Site. (Williams; Ex. 99.) CFAC installed additional monitoring wells on the Site (as opposed to its perimeter) in the early 1990s. (Williams.)

182. On June 11, 1993, shortly before the TW-17 monitoring well was installed southwest of the West Landfill, MDHES advised CFAC that “[s]ince learning of the presence of buried potliner in the abandoned landfill, the Water Quality Bureau has suspected the abandoned landfill as a greater contributor of ground water CN [cyanide] than either of the north percolation ponds.” (Ex. 128.) A 1993 Hydrometrics investigation conducted shortly after the new wells were installed found that by far the Site’s highest cyanide and fluoride concentrations were observed at TW-17, just downgradient of the West Landfill. (Ex. 270; Baris.)

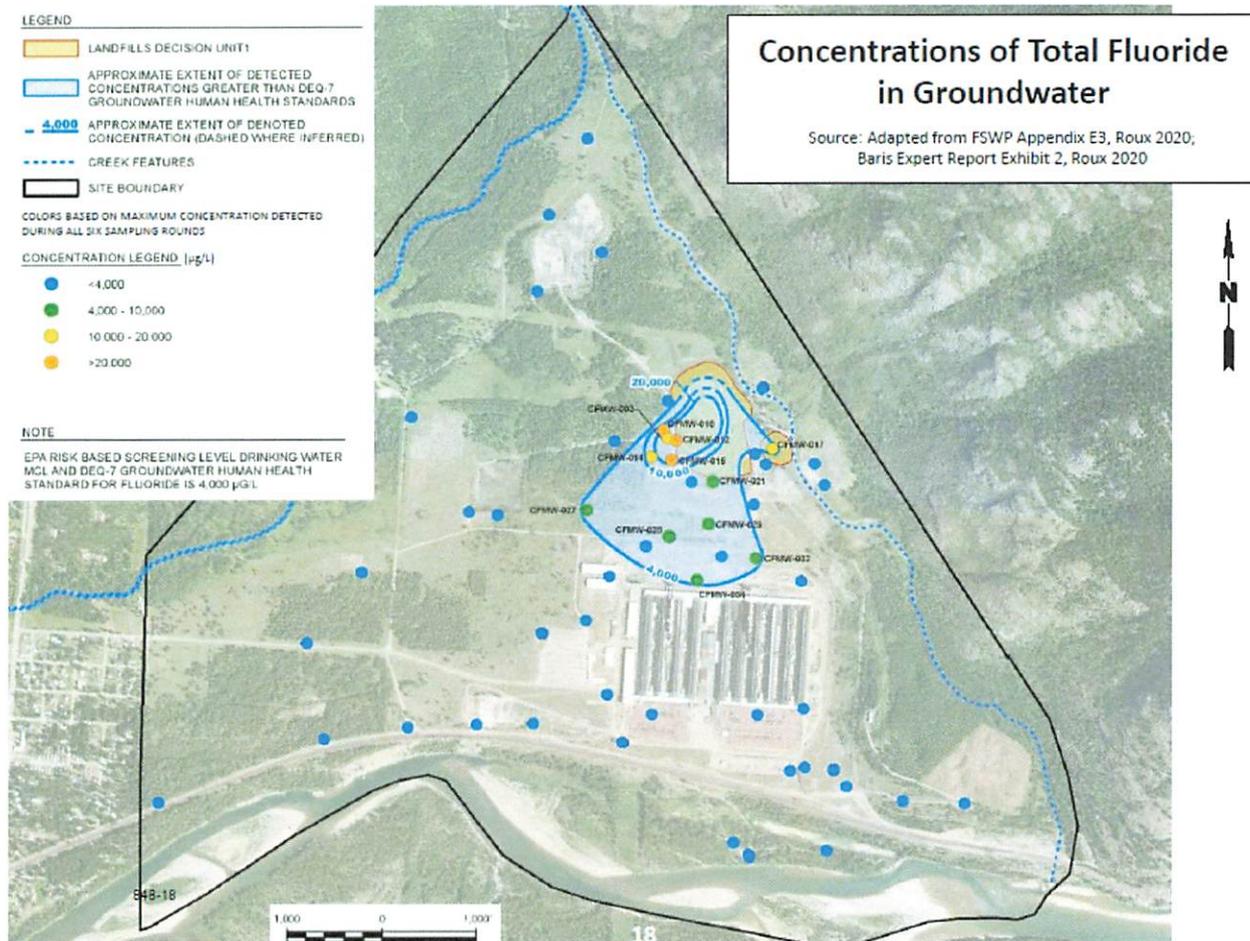
183. More recently, six rounds of groundwater sampling were conducted between August 2016 and October 2018. (Baris.) Cyanide and fluoride have been identified as the primary contaminants of concern in groundwater based upon the frequency of detection and exceedance of water quality standards. (Agreed ¶ 49;

Ex. 134 at 26.) While cyanide appears to be of greater concern than fluoride, both require remediation. (Baris.)

184. The groundwater in this area flows in the south/southwesterly direction. (See Ex. 134 at 29; Baris.) The groundwater sampling indicates that the highest concentration of both cyanide and fluoride is directly southwest of the West Landfill and WSSP:



(Ex. 848 at 15; see also Ex. 140 at 224.)



(Ex. 848 at 18.)

185. The Former Drum Storage Area and Center Landfill are considered lesser, secondary contributors. (Ex. 134 at 30; *but see* Ex. 868 at 56 (concluding that the Former Drum Storage Area may be even less of a contributor than originally thought).)

186. Accordingly, CFAC argues that the groundwater contamination can be attributed to ARCO's disposal of waste at the Site because ARCO was the only party to dispose of SPL at the West Landfill and sludge at the WSSP. ARCO seeks to diminish the West Landfill's contribution by focusing on the WSSP, where both

parties disposed of leachate in the 1980s and 1990s and CFAC disposed of pot diggings in 1994.

187. To show that its discrete disposals of waste on the WSSP are not currently contributing to cyanide and fluoride in the groundwater, CFAC relies on the expert testimony of Andrew Baris, a principal of Roux Engineering Associates, the firm that performed most of the Site analysis. Baris used a “mass flux” analysis to evaluate the potential impact of disposal activity on groundwater quality. “Mass flux” refers to the mass of contaminants, whether cyanide or fluoride, that is passing through a transect during a specified period.

188. Specifically, Baris estimated the total mass of cyanide and fluoride that could have been present in the leachate and pot diggings disposed of by CFAC, then compared that to the mass flux of cyanide and fluoride in groundwater emanating daily from beneath landfills at the Site.

189. For the leachate events, Baris found that the estimated masses of cyanide and fluoride in the leachate discharged on the WSSP in 1987, 1989, and 1994 by CFAC comprise a combined 0.01 percent of total cyanide mass and 1.38 percent of total fluoride mass that has migrated in groundwater from beneath the landfills since 1994. Thus, according to Baris, about 99 percent of cyanide and fluoride leaching to groundwater cannot be attributed to the combined leachate discharged by CFAC in 1987, 1989, and 1994. And, in Baris’s opinion, it is more

likely than not that cyanide groundwater impacts (if any) attributable to the leachate drainage activities have already migrated through the groundwater system at the Site and would not themselves present any need for future remediation.

190. Similarly, Baris used the same mass flux analysis to consider the placement of the pot diggings on the WSSP. Baris used the amount of 6 cubic yards of cathode carbon and applied a cyanide concentration of 0.1 percent. He then compared that mass to the mass from the landfills, and determined it contributed 0.03 percent. Likewise, for fluoride, he concluded a contribution of 1 percent of the estimated total mass that has migrated in groundwater from beneath the landfills since 1998. Thus, he concluded 99 to 99.7 percent of cyanide and fluoride leaching to groundwater cannot be attributed to the cathode carbon (CFAC's pot diggings) that was excavated in 1998.

191. Baris further opined that the contamination from CFAC's discrete disposals left the system even faster than his model indicated as he assumed no attenuation of the contamination even though at least some attenuation was guaranteed (although more so for cyanide than fluoride).

192. Baris lacked sufficient information about ARCO's leachate disposal events to analyze them under his mass flux model. However, he testified that if leachate disposed of more recently by CFAC had already fully migrated and/or attenuated, so too had the contamination from ARCO's earlier leachate disposal.

193. Ultimately, Baris concluded that the high concentrations of cyanide and fluoride found in groundwater monitoring wells immediately downgradient of the West Landfill and WSSP are attributable primarily to the 61,800 to 68,000 tons of SPL disposed of in the West Landfill prior to 1981 by ARCO. According to Baris, the SPL is a continuous point source because it is a solid material sitting in the landfill that, when it encounters water, continually generates leachate that contaminates the groundwater. It is therefore distinguishable from the cyanide and fluoride put in the percolation ponds that immediately migrated down into the groundwater (e.g., an instantaneous release). Baris's conclusions are reflected in the remediation documents. (*See* Ex 134; Ex. 868 at 21, 58.)

194. ARCO disagrees, insisting that CFAC's disposals on the WSSP are contributing events, relying on the testimony of Peter Jewett, an environmental remedial expert. Jewett's primary criticism of Baris's analysis is that Baris cannot make the necessary connection between the West Landfill and the groundwater. The record shows that disposals on the West Landfill ceased in 1981 and the landfill was capped at that time. As outlined above, the landfill extends approximately 15 to 22 feet below surrounding grade but the groundwater levels beneath the landfill are approximately 36 feet to 87 feet below grade. (Ex. 868 at 21.) Because the Remedial Investigation Report did not consider lateral migration of stormwater into the landfill, Jewett insists there is no active migration pathway

between the landfill and the groundwater. Jewett concedes, however, that contamination could be coming from the impacted soil beneath the landfill, which could be as thick as 115 feet. (Ex. 868 at 21.)

195. Jewett further opined that groundwater contamination cannot be evaluated based solely on the volume of SPL placed on a landfill; the focus should be concentration of contamination, not volume of disposal. According to Jewett, Baris's analysis fails to make that conversion, and increased cyanide concentrations downgradient from the WSSP indicate that CFAC's disposal of leachate and pot diggings meaningfully contributed to groundwater contamination. In support of his opinion, Jewett notes that the cyanide plume beneath the Site has gotten bigger and worse. (*See* Ex. 275 (showing spike in cyanide levels in TW-17 in 1997); Ex 848 at 57 (showing 5x increase in levels comparing 1993 to 2016).) And, in Baris's own depiction of the plume, the flow transects in the Remedial Investigation Report indicate there is no contamination below the landfill itself. (*See* Ex. 134 at 328.) As opined by Jewett, if the landfill was a continuing source, as opposed to a historical source, one would expect to see current contamination beneath the landfill.

196. Jewett is also critical of the number of assumptions a mass flux analysis requires regarding both the behavior of the contaminants and the groundwater. While Jewett testified that he did not disagree with any of Baris's

math, he simply said it was beside the point. Jewett also emphasized that no groundwater sampling was performed under either the West Landfill or the WSSP. This is important, according to Jewett, because there is only a single plume of contamination that is otherwise difficult to attribute to a discrete area.

197. Ultimately, there is merit to the conclusion that cyanide and fluoride levels in the groundwater sampling wells immediately downgradient from the West Landfill and WSSP show that these are the two primary sources of continuing groundwater pollution. Even if Jewett is correct that the impacted soil beneath the landfill or WSSP is causing the continued contamination—not the features themselves—that contamination originated at these Site areas. Because ARCO was the only party to dispose of SPL on the West Landfill, ARCO is responsible for a majority of the groundwater contamination.

198. But Baris is not entirely accurate in his claim that his mass flux analysis persuasively shows that the contamination from CFAC's waste disposal on the WSSP completely migrated or attenuated as to absolve CFAC from all responsibility for groundwater pollution from that source. Jewett's opinion is more persuasive that contaminant concentration matters in this context and that Baris's mass flux analysis was based on too many assumptions about the behavior of both the contaminants and the groundwater. Baris also conceded during cross-

examination that he did not calculate an error rate and, given the uncertainties in his model, it could be off by a factor of ten.

199. Given the parties' activities on the Site and the contamination levels reflected in the groundwater sampling wells, both parties contributed to the groundwater contamination, albeit ARCO more so.

C. EPA Action and National Priority List

1. Initial CERCLA Investigation

200. In June 1988, Ecology & Environment, Inc., under contract with EPA, conducted a CERCLA site assessment for the Site which included drilling and sampling monitoring wells CF-MW-1 (upgradient) and CF-MW-2 (downgradient). (Ex. 250 at 17–20, 41.) The assessment also reviewed sampling taken from seven existing wells. (Ex. 250 at 20–21, 39.) The site assessment indicated “a release of cyanide to ground water and surface water which is also attributable to plant processes.” (Ex. 250 at 24.) In February 1989, EPA determined that no further action under CERCLA was required. (Ex. 828.)

201. On March 5, 2013, EPA began a new investigation of the Site for possible listing on the CERCLA National Priorities List. (Agreed ¶ 19.)

202. Between September 23 and October 1, 2013, Weston Solutions, Inc., under contract with EPA, conducted a CERCLA site inspection of the Site that

included taking soil, surface-water, and groundwater samples, and reviewing the Site's operational history. (Stroiazso; Otis; Ex. 200.)

203. In April 2014, EPA issued a Site Reassessment Report based on this inspection that concluded there were releases of various hazardous substances at the Site, including from the landfills, the WSSP, and the North and South Percolation Ponds, among other areas. (Stroiazso; Ex. 200.)

204. Roux Engineering Associates, Inc. ("Roux"), an environmental consulting firm, discussed with CFAC in July 2014 its proposal to lead Site investigation efforts with EPA. (Baris; Ex. 842.) Roux began its initial work in September 2014. (*See* Ex. 594.)

205. In approximately November 2014, CFAC began discussing with EPA the possibility of entering an Administrative Order on Consent to conduct a Remedial Investigation/Feasibility Study for the Site under CERCLA, while voluntarily beginning to prepare a Remedial Investigation/Feasibility Study Work Plan. (Stroiazso; Ex. 202 (press release).)

206. On February 25, 2015, CFAC contacted ARCO to inform it that CFAC would soon begin to negotiate a Remedial Investigation/Feasibility Study Administrative Order on Consent with EPA to investigate the contamination at the Site, and that it welcomed ARCO's views with respect to the Site. (Stroiazso; Ex. 203.)

207. On March 26, 2015, EPA proposed placing the Site on the National Priority List. (Agreed ¶ 20; Ex. 204.)

208. Writing to EPA on May 29, 2015 in opposition to the proposed National Priority List listing, ARCO wrote that CFAC “has already taken significant steps to address contamination at the Site—including hiring a consultant to investigate the Site, forming a Community Liaison Panel, and contracting for the demolition of major buildings to prepare for re-development.” (Baris; Stroiazzo; Ex. 205 at 10.)

209. On June 9, 2015, EPA sent a CERCLA § 122(e) Special Notice letter to ARCO and CFAC requesting that they, as “potentially responsible parties [“PRPs”],” “voluntarily negotiate a consent order” in which the parties would “perform a remedial investigation and feasibility study . . . under EPA’s oversight at the Site.” EPA also requested that both parties reimburse EPA’s response costs incurred in responding to releases and threatened releases of hazardous substances at the Site. (Agreed ¶ 21; *see, e.g.*, Ex. 206.)

210. Prior to receipt of the General Notice, ARCO responded to EPA’s § 104(e) request for the Site. That response noted that several of the requested documents passed with the Site and were no longer held by ARCO. (Johnson.)

211. On June 25, 2015, CFAC accepted EPA’s invitation to negotiate an Administrative Order on Consent to conduct a Remedial Investigation/Feasibility

Study. (Stroiazzo; Doc. 38 at ¶ 18.) ARCO declined to participate in the Administrative Order on Consent negotiations. (Stroiazzo; Ex. 207.) Presently, CFAC is in full compliance with the Administrative Order on Consent and has incurred no penalties. (Stroiazzo.)

212. On November 23, 2015, EPA approved CFAC's Remedial Investigation/Feasibility Study Work Plan, prepared by Roux. (*See* Ex. 209.) On November 30, 2015, CFAC entered an Administrative Order on Consent with EPA to complete a Remedial Investigation/Feasibility Study for the Site. (Agreed ¶ 22; *see* Ex. 26.) CFAC did not agree to reimburse EPA for its CERCLA response costs incurred prior to the date of the Administrative Order on Consent. (Ex. 26 at 23–25.)

213. Regarding the State of Montana, however, CFAC was “[u]nable to agree on an Administrative Order on Consent” with MDEQ and “[n]egotiations with [MDEQ] ended in December 2014.” (Agreed ¶ 63; Doc. 91 ¶ 54; Doc. 1 at ¶¶ 66-67.) According to CFAC's regulatory counsel, Andrew Otis, CFAC chose to proceed with EPA because he believed it would provide more flexibility and was the better option.

214. ARCO has not entered an Administrative Order on Consent with EPA or MDEQ to address contamination at the Site. (Doc. 38 at ¶ 20.) However, ARCO has never disputed that it is a PRP for the Site. (Johnson.) Rather, ARCO

took the position that it did not need to negotiate an Administrative Order on Consent with EPA because: CFAC had already publicly stated its intent to perform the Remedial Investigation/Feasibility Study and enter an Administrative Order on Consent with EPA, CFAC's consultant had already prepared the Remedial Investigation/Feasibility Study Work Plan, and ARCO believed that it was entitled to indemnification from CFAC under the parties' 1985 Acquisition Agreement. (Johnson.)

2. The Remedial Investigation

215. At a general level, the Administrative Order on Consent required CFAC to cooperate with EPA to develop a Remedial Investigation/Feasibility Study and defined delivery dates for work. It also outlined specific quality control and steps, as well as requiring financial assurance and reimbursement of EPA's costs. (Stroiazzo.)

216. More specifically, CFAC's Remedial Investigation/Feasibility Study with EPA required CFAC:

- a. to determine the nature and extent of contamination and any threat to the public health, welfare, or the environment caused by the release or threatened release of hazardous substances, pollutants, or contaminants at or from the Site, by conducting a remedial investigation . . . as more specifically set forth [in the November 23,

2015 Remedial Investigation/Feasibility Study Work Plan], and the EPA-approved Sampling and Analysis Plans (‘SAPs’) that will be issued during the preparation performance of the [Remedial Investigation/Feasibility Study];

- b. to identify and evaluate remedial alternatives to prevent, mitigate, or otherwise respond to or remedy any release or threatened release of hazardous substances, pollutants or contaminants at or from the Site, by conducting a feasibility study . . . more specifically set forth in the Remedial Investigation/Feasibility Study Work Plan; and
- c. to recover response and oversight costs incurred by EPA.

(Ex. 26; Baris.)

217. On September 9, 2016, the Site was added to the National Priority List. (Agreed ¶ 23.)

218. In February 2020, Roux submitted its final Remedial Investigation Report, which EPA approved on February 27, 2020. (Agreed ¶ 24; *see* Ex. 134.) The Remedial Investigation Report presented the results of the multiple phases of the Remedial Investigation, including a review of the Site’s operational history, and a summary of the results of Roux’s prior investigations of the different media at the Site, including soils, sediment, surface water, pore water (the interface between groundwater and surface water), and groundwater. (Ex. 134 at 181.)

219. The Remedial Investigation Report concluded that

groundwater is the primary migration pathway for the potential transport of Contaminants of Concern (“COCs”) from the various source areas. In addition, results indicate that cyanide and fluoride are the primary COCs from a contaminant migration/fate and transport perspective. All other primary COCs identified in soil, sediment, or surface water samples within the source areas appear to be stable and not migrating at levels of concern based upon risk assessment results.

(Agreed ¶ 25; Ex. 134 at 144; *see also* Ex. 134 at 182 (contaminant table).)

220. The Remedial Investigation Report determined that the concentrations of cyanide and fluoride

are highest adjacent to the primary source areas within the Plume Core Area (footprint of elevated concentrations of cyanide and fluoride in upper hydrogeologic groundwater), including the West Landfill and [WSSP]. . . . Cyanide and fluoride emanate from this source area . . . and migrate in south/south-westerly direction from the aforementioned landfills toward the Flathead River. Total cyanide and fluoride concentrations in groundwater within the upper hydrogeologic unit decrease with increasing distance away from the landfills.

(Ex. 134 at 183; Baris.)

221. The Remedial Investigation Report further identified PAHs in the soil as contaminants of concern. (Baris; *see* Ex. 134 at 184–85.)

222. In addition to the Remedial Investigation Report, Roux has completed, *inter alia*, the following investigation activities at the Site: Phase I Characteristics Summary Report, Screening Level Ecological Risk Assessment, Groundwater/Surface Water Data Summary Report, Supplemental South Ponds Assessment; Phase II Site Characteristics Data Summary Report, Baseline Human

Health Risk Assessment, and Baseline Ecological Risk Assessment. (Baris; *see* Ex. 134.)

3. The Feasibility Study

223. In January and February 2020, EPA and Roux discussed which remedial alternatives should be retained for detailed review in the Feasibility Study, to be described in the Feasibility Study Work Plan. EPA and CFAC decided to preliminarily address these issues in a draft of the Technology Screening portion of the Feasibility Study Work Plan, which Roux submitted, and EPA and MDEQ reviewed and commented upon. (Baris; *see* Ex. 213 (response to comments); Ex. 139 (Technology Screening Technical Memorandum).)

224. “Based on the size and complexity of the Site, decision units (DUs) with common elements or conditions were established to evaluate and address [contaminants of concern] specific to an environmental media and/or area of the Site. . . . Ultimately, a set of remedial alternatives will be established and evaluated for each identified DU.” (Ex. 140 at 31; Baris.) A total of six Decision Units were defined:

- a. **Landfills DU1**, comprised of the West Landfill, WSSP, and Center Landfill;
- b. **Landfills DU2**, comprised of the Sanitary Landfill, the Industrial Landfill, the East Landfill, and the Asbestos Landfills;

- c. **Soil DU**, comprised of soils to the north and within the Main Plant Area, including the Former Drum Storage area;
- d. **North Percolation Pond DU**, comprised of the Northeast and Northwest Percolations Ponds;
- e. **River Area DU**, comprised of the soils, sediment, and surface water in the South Percolation Ponds, Backwater Sampling Area, and Riparian Channel Area; and
- f. **Groundwater DU**.

(Ex. 140 at 31–41; Baris.)

225. On October 12, 2020, Roux submitted a draft Feasibility Study Report to EPA for its review, outlining specific possible alternatives for each of the Decision Units. (Agreed ¶ 26; Ex. 217.)

226. Roux submitted a revised draft Feasibility Study incorporating EPA’s and MDEQ’s comments on May 25, 2021. (Baris; Ex. 864.)

227. While ARCO did not participate in the process of developing the draft Feasibility Study, it did submit a report with comments to EPA. (See Ex. 844 at 68–72; Baris.) Neither MDEQ nor EPA accepted any of ARCO’s comments, which specifically alleged “data gaps” regarding contamination from the West Landfill. In response, EPA and MDEQ stated that “The [Remedial Investigation] results indicate that W Landfill and WSSP area is the primary source of cyanide

and fluoride in groundwater at the Site and the Center Landfill is likely a secondary source.” (Ex. 868 at 20; Baris.)

228. On June 17, 2021, EPA approved the Feasibility Study. (Ex. 868.) That Feasibility Study includes the following cost estimates provided by Roux for evaluated remedial alternatives that are expected to achieve EPA’s remedial goals for the Site, grouped by Decision Unit:

Decision Unit	Lowest-Cost Remedy	Highest-Cost Remedy	Cost of Roux’s Prefer. Remedy
Landfills DU1 / Groundwater DU	\$27,716,290	\$165,590,849	\$45,642,497
Landfills DU2	\$6,967,323	\$6,967,323	\$6,967,323
Soil DU	\$1,171,948	\$1,606,306	\$1,237,989
North Percolation Ponds DU	\$2,286,195	\$3,129,010	\$2,286,195
River Area DU	\$1,401,725	\$1,401,725	\$1,401,725
TOTALS	\$39,543,481	\$178,695,213	\$57,535,729

(See Ex. 868 at 308–12.) As evidenced above, the remediation costs associated with Landfills DU1 and Groundwater DU are expected to be the primary cost drivers, underscoring the parties’ dispute over those specific Site features.

229. Although the potential remedial actions vary greatly by Site area, the Feasibility Study generally recommends capping and slurry-wall containment for Landfills DU1; capping and soil covers for Landfills DU2; soil cover and onsite excavation for Soils DU, North Percolation Ponds DU and River Area DU; and chemical treatments and monitoring for Groundwater DU. (Baris; see Ex. 868 at 236–52.)

230. EPA has not yet selected the CERCLA remedial action for the Site and will not do so until after publication of a Proposed Plan and issuance of a final Record of Decision, which is not anticipated until at least 2022. (Stroiazzo.) Neither CFAC nor ARCO has agreed to design or perform the selected remedial action at the Site. (Stroiazzo.)

V. CERCLA COST RECOVERY

231. Broadly speaking, CERCLA promotes “the timely cleanup of hazardous waste sites” and ensures “that the costs of such cleanup efforts [are] borne by those responsible for the contamination.” *Burlington N. & Santa Fe Ry. Co. v. United States*, 556 U.S. 599, 602 (2009) (internal quotation marks omitted). To accomplish these goals, the Act imposes strict liability for remediating the release or threatened release of hazardous substances on four classes of people. 42 U.S.C. § 9607(a). These four classes—which include past and present owners and operators, transporters, and those who arrange for the disposal or treatment of hazardous substances—are commonly referred to as “Potentially Responsible Parties” or “PRPs.” *See* 42 U.S.C. § 9604(a). CERCLA creates both public and private remedies against PRPs for financing the “expeditious cleanup of environmental contamination caused by hazardous waste releases.” *Young v. United States*, 394 F.3d 858, 862 (10th Cir. 2005).

232. Relevant here, CERCLA offers two forms of relief for privately funded cleanups: cost-recovery and contribution, which are “complementary” yet procedurally “distinct” remedies. *United States v. Atl. Research Corp.*, 551 U.S. 128, 168 (2007). Section 113(f) grants PRPs a right to contribution, 42 U.S.C. § 9613(f)(1), while Section 107(a) permits recovery of cleanup costs, 42 U.S.C. § 9607(a)(4):

[T]he remedies available under §§ 107(a) and 113(f) complement each other by providing causes of action to persons in different procedural circumstances. Section 113(f)(1) authorizes a contribution action to PRPs with common liability stemming from an action instituted under § 106 or § 107(a). And § 107(a) permits cost-recovery (as distinct from contribution) by a private party that has itself incurred cleanup costs.

Atl. Research Corp., 551 U.S. at 139 (internal citations omitted). Here, CFAC asserts both cost-recovery and contribution claims against ARCO.

233. To succeed on a private claim for recovery under § 107(a), CFAC must show: (1) that the Site is a “facility” as defined by CERCLA, 42 U.S.C. § 9601(9); (2) a “release” or “threatened release” of any “hazardous substance” from that facility has occurred, 42 U.S.C. § 9607(a)(4); (3) such release or threatened release caused CFAC to incur response costs that were “necessary” and “consistent with the national contingency plan,” 42 U.S.C. § 9607(a)(4), (a)(4)(B); and (4) ARCO is within one of four classes of persons subject to liability under § 107(a). *City of Colton v. Am. Promo. Events, Inc.-W.*, 614 F.3d 998,

1002–03 (9th Cir. 2010); *see also Carson Harbor Vill., Ltd. v. Unocal Corp.*, 270 F.3d 863, 871 (9th Cir. 2001) (en banc).

234. The parties agree that they are both “persons” within the meaning of 42 U.S.C. § 9601(21), (Agreed COL ¶¶ 1,2), the Site is a “facility” within the meaning of 42 U.S.C. § 9601(9), (Agreed COL ¶ 3), and they were or are both an “owner” and “operator” of a “facility” at the time of disposal pursuant to 42 U.S.C. §§ 9601(9) and (20), 9607(a)(1) and (2), (Agreed COL ¶¶ 4, 5). Additionally, the Court concludes that releases of such hazardous substances have occurred pursuant to 42 U.S.C. §§ 9601(22) and 9607(a). The parties’ dispute based on the proof at trial centers on the third element: whether CFAC’s response costs were necessary and consistent with the National Contingency Plan.

235. For costs to be recovered under CERCLA, they must be both (a) “necessary costs of response” and (b) “incurred . . . consistent with the national contingency plan.” 42 U.S.C. § 9607(a)(4)(B); *Cadillac Fairview/Calif., Inc. v. Dow Chem. Co.*, 840 F.2d 691, 695 (9th Cir. 1988). The party seeking recovery bears the burden of proving necessity and consistency with the National Contingency Plan. *Id.*; *see also City of Colton*, 614 F.3d at 1002–03.

236. A “response” means a “removal” or “remedial” action. 42 U.S.C. § 9601(25). In turn, “removal” actions are those designed to affect an interim

solution to a contamination problem, *see id.* § 9601(23), while “remedial” actions are designed to affect a permanent solution, *see id.* § 9601(24).

237. Costs are “necessary costs of response” when “an actual and real threat to human health or the environment exist[s],” and the costs were incurred in a response action addressed to that threat. *Carson Harbor Vill. Ltd.*, 270 F.3d at 871, 872; *City of Colton*, 614 F.3d at 1003. Consequently, response costs do not include the “recovery of private damages unrelated to [a] cleanup effort.” *Daigle v. Shell Oil Co.*, 972 F.2d 1527, 1535 (10th Cir. 1992).

238. Costs “are considered consistent with the [National Contingency Plan] ‘if the action, when evaluated as a whole, is in substantial compliance’ with it.” *City of Colton*, 614 F.3d at 1003 (quoting 40 C.F.R. § 300.700(c)(3)(i)). The National Contingency Plan sets out a detailed list of procedures and requirements promulgated by EPA and is “designed to make the party seeking response costs choose a cost-effective course of action to protect public health and the environment.” *Id.* (internal quotation marks omitted).

239. The National Contingency Plan governs all aspects of the response, from discovery of the release of a hazardous substance, through the investigatory process, the decision on whether a cleanup is required and, if so, what form it should take, and implementation of the selected response. *See* 40 C.F.R. §§ 300.405–300.435. For example, the National Contingency Plan requires certain

public participation requirements be met and mandates a CERCLA-quality cleanup. (Muno; Williams.)

240. To demonstrate National Contingency Plan consistency, a plaintiff must maintain and provide an accurate accounting of its claimed costs. *See generally* 40 C.F.R. § 300.160(a)(1) (“accurate accounting of . . . private party costs incurred for response actions”); 40 C.F.R. § 300.700(c)(5)(ii) (providing for applicability of section 300.160 to private party response actions).

“[T]he [National Contingency Plan] does not define ‘accurate accounting’ or otherwise elaborate on what is meant by ‘sufficient.’” *United States v. W. R. Grace & Co.*, 280 F. Supp. 2d 1149, 1180 (D. Mont. 2003) (assessing costs incurred by federal government, which are evaluated under a more lenient standard). Documentation must be “adequate” and “sufficient,” *id.*, which here should include at least the underlying invoices with a description of what each cost was for and when that cost was incurred. Absent such documentation, the Court cannot determine whether an individual cost was necessary, duplicative of other costs, or even a response cost at all.

241. It is necessary to confront the task of determining which of CFAC’s past costs may be recovered under CERCLA

242. CFAC alleges that it has incurred \$22,726,817.75 in response costs through March 31, 2021, or “past response costs” for Site-related activities,

including: public relations, legal services, building demolition and related waste removal, technical support, employee costs, South Pond bank stabilization and excavation, well sampling, performance of the Remedial Investigation/Feasibility Study, and EPA reimbursement. (*See* Ex. 739 (cost summary); Stroiazzo.) Of those, ARCO argues only approximately \$5 million are recoverable under CERCLA. (Koch; Exs. 1272, 1273.)

243. Both parties presented expert testimony on recoverable costs, CFAC relying on the testimony of William Muno, (*see* Ex. 861) and ARCO relying on the testimony of Gayle Koch, (*see* Exs. 1272, 1273), and Marcia Williams. According to Muno, response costs are interpreted broadly and include all the costs incurred by CFAC here. On the other hand, Williams testified that many of CFAC's response costs are better categorized as operational costs and Koch testified that CFAC failed to either show costs were necessary or provide accurate documentation for costs incurred. As with most things, the answer lies somewhere in the middle.

244. ARCO seeks to exclude costs on three primary grounds: (1) costs expended after March 31, 2021; (2) costs not consistent with the National Contingency Plan; and (3) costs without proof of payment. (Koch; *see* Ex. 1273.) The second argument is addressed in the context of CFAC's specific cost requests. As to ARCO's first argument, pursuant to the parties' pretrial stipulation, costs

incurred after March 31, 2021 are not considered past response costs. As to ARCO's third argument, the absence of proof of payment is not an absolute bar to cost recovery. As conceded by Koch, while evidence of payment may be indicative of the National Contingency Plan requirements that a cost be "incurred" and supported by accurate documentation, the statute does not explicitly require it. Accordingly, invoiced costs that are consistent with the National Contingency Plan and otherwise supported by accurate documentation are recoverable even if there is no proof of final payment.

245. The following are recoverable past response costs under CERCLA:

Vendor	Amount Requested	Amount Recoverable
Allegra Marketing	\$2,751.70	\$2,751.70
Attorney Fees	\$708,872.48	\$206,082.82
Aqua Terra Restoration	\$101,459.00	\$0.00
Calbag	\$7,724,524.84	\$0.00
EPA	\$1,059,376.57	\$1,059,376.57
ERM Consulting	\$265,892.46	\$68,276.08
Green Communications	\$515,680.19	\$380,611.01
Haley Beaudry	\$59,564.40	\$32,102.60
Hydrometrics, Inc.	\$306,607.43	\$231,531.74
IRS Environmental	\$64,989.00	\$49,980.00
Jacob Hall Design	\$500.00	\$400.00
MBS GeoConsulting	\$13,337.50	\$13,337.50
Montana Helical Piers	\$325,256.00	\$325,256.00
Morrison-Maierle	\$402,471.73	\$402,471.73
Mountain States Env't'l Servs., Inc.	\$20,925.00	\$20,925.00
MWC Viking Pump Inc.	\$34,632.00	\$0.00
Roux	\$8,814,253.18	\$8,594,966.79
Sandry Construction	\$977,533.63	\$977,533.63
Sard Verbinnen & Co.	\$40,000.00	\$0.00

John Stroiazzo and Steven Wright	\$1,288,190.64	\$0.00
TOTAL	\$22,726,808.75	\$12,365,603.17

A. EPA Remediation

1. EPA

246. EPA has billed \$1,059,376.57 to CFAC prior to December 31, 2019 in EPA's oversight costs pursuant to the Administrative Order on Consent. (Agreed ¶ 50; Stroiazzo; Exs. 707, 708, 710, 711; *see also* Ex. 705, 739 (summaries).) This includes costs incurred by EPA to administer and supervise the Administrative Order on Consent, including salaries of EPA employees and their expenses. (Stroiazzo.)

247. Because ARCO's only challenge to these costs was lack of proof of payment, (*see* Ex. 1273), the entire amount of \$1,059,376.57 is recoverable.

2. Roux

248. Roux has been CFAC's primary contractor, having begun Remedial Investigation/Feasibility Study work at the Site in 2014, and has been uniquely engaged with EPA and MDEQ in every aspect of the remediation process at the Site. CFAC seeks to recover \$8,814,253.18 it has paid to Roux as part of this process. (*See* Ex. 739.) While CFAC's summary exhibit for the Roux invoices totals \$8,856,941.54, (*see* Ex. 593), CFAC adjusted that amount at trial to remove costs incurred after March 31, 2021. (Stroiazzo.)

249. According to Koch, only \$8,594,966.79 of the requested \$8,814,253.18 is consistent with the National Contingency Plan. Costs that are not recoverable are those related to the facility decommissioning and demolition (primarily concrete sampling) and projects given “litigation support” designations. Both challenges are sustained. As discussed below, costs associated with facility decommissioning and demolition are not recoverable responses costs. Nor are those associated with the present litigation.

250. Because ARCO’s only other challenge to Roux’s costs was lack of proof of payment, (*see* Ex. 1273), the reduced amount of \$8,594,966.79 is recoverable.

3. ERM Consulting & Engineering

251. CFAC seeks to recover \$265,892.46 it paid to ERM Consulting for “strategic support” and water sampling performed on residential wells in the area known as “Aluminum City.” (*See* Exs. 481, 739.)

252. Entries described only as “Strategic Support” or “Revised CFAC DDD Assessments” are not recoverable. According to Stroiazzo, ERM’s activity during this period involved categorizing and valuing the assets within CFAC’s facility. This assessment was solely for the benefit of CFAC and unrelated to the cleanup of the Site. Thus, the first six invoices from ERM—totaling \$197,616.38—are not recoverable. (*See* Exs. 823, 483, 482, 820, 824, 819.)

253. The \$68,276.08 ascribed to ERM's April 2014 residential well sampling presents a closer question. (*See* Exs. 821, 822.) ARCO argues that because these costs pre-date the Administrative Order on Consent and any other agreement with EPA, there is insufficient evidence to link them to the remediation itself, as opposed to CFAC's own interest in assessing its liability. Koch conceded, however, that if this data was used in the Remedial Investigation process, it would be recoverable.

254. On or about April 4, 2014, Weston Solutions, Inc. prepared a Site Reassessment for the CFAC facility for EPA. (*See* Ex. 1073.) The assessment reviewed groundwater conditions at the Site, including samples taken from five residential wells. (*See* Ex. 1073 at 0440616, 0440622–23.) It contains many references to the results obtained from those wells and concludes that they contain several contaminants related to the production of aluminum, including cyanide. (Ex. 1073 at 0440661–62, 0440668–69.) ERM's residential well sampling then occurred right after this report was issued, on April 9–11. (*See* Exs. 821, 822.) Thus, while this sampling predates the Administrative Order on Consent, it was triggered as part of EPA review of the Site and, as explained by Stroiazzo, continues today as part of the EPA process. (*See* Stroiazzo (discussing length of sampling and its inclusion in later public meetings); *see also* Ex. 134 at 23

(mentioning Aluminum City residential wells.) As testified by Muno, defining the nature and extent of contamination is required by the National Contingency Plan.

255. The \$68,276.08 ascribed to ERM's April 2014 residential well sampling is therefore a recoverable response cost.

4. Hydrometrics, Inc.

256. Similarly, CFAC seeks to recover \$306,607.43 it paid to Hydrometrics, Inc. for residential water sampling and other work related to surface and groundwater at the Site. (*See Exs. 515, 739.*)

257. According to Koch, only \$217,762.92 of this amount is consistent with National Contingency Plan, (*see Ex. 1273*); excluded costs are those that (1) predate the Administrative Order on Consent, (2) relate to the MPDES permit and open pit permit (decommissioning), (3) relate to stopgap work for the South Percolation Ponds and (4) a lone \$121.80 for lack of documentation, (*see Ex. 1272 at 42–49*).

258. Koch's opinion on the permit costs, (2) above, is persuasive. Costs associated with CFAC's permitting are not recoverable, this includes those related to decommissioning the plant.

259. Certain costs that predate the Administrative Order on Consent, (1) above, are recoverable, however. Even though Hydrometrics' December 9, 2014 Invoice is titled "CFAC Discharge Permit" and "Draft," the services outlined

primarily regard domestic well sampling and coordination with EPA that occurred prior to the Administrative Order on Consent. (*See* Ex. 516.) As a result, the \$9,612.26 in that invoice is recoverable.

260. As discussed below, (3) above, or costs related to the South Percolation Ponds stopgap measures are recoverable. As a result, an additional \$4,156.56 is recoverable.

261. Finally, Koch excludes \$121.80 that is noted on Invoice No. 28874 (dated 07/21/2020) for a prior outstanding balance related to Invoice No. 28668. (*See* Ex. 1272 at 49; Ex. 829 at 81.) CFAC does not seek to recover costs from any invoices dated between February 2020 and May 2020. (*See* Ex. 515 at 17–18.) This unpaid prior balance arose during that timeframe. Because it was not documented or requested by CFAC, this amount is not recoverable.

262. Because ARCO's only other challenge to Hydrometrics' costs was lack of proof of payment, (*see* Ex. 1273), the reduced amount of \$231,531.74 is recoverable.

5. MBS GeoConsulting, Ltd.

263. CFAC seeks to recover \$13,337.50 it paid to MBS GeoConsulting, Ltd. for its peer review of the Draft Feasibility Study. (*See* Exs. 739, 835.)

264. According to Koch, this cost is not recoverable because the review was performed after the document was submitted to the agency for approval and it

appears it was performed by a Canadian company with no experience with the United States' CERCLA program.

265. Koch's first argument lacks merit as she conflates the date of the invoice with the date of the service. The final Remedial Investigation was submitted to EPA in February 2020, (*see* Agreed ¶ 24), and the draft Feasibility Study was submitted to EPA on October 12, 2020. (Ex. 217). The fact that MBS's invoice is dated October 26, 2020 does not mean the work was performed at that time; rather, it is reasonable to assume that MBS billed CFAC at one time for the work performed during the draft Remedial Investigation/Feasibility Study process.

266. Nor is Koch's second argument persuasive. To be sure, the MBS invoice does not contain specific time entries of the work performed, the methodology for peer review used, or MBS's experience in this field. But Stroiazzo testified during trial that CFAC hired MBS to review the relevant remediation documents as part of a "quality control" effort given the numerous site areas in dispute. For a cost to be recoverable, it must be consistent with a CERCLA-level cleanup. CFAC's effort to have "a fresh set of eyes" review the potential remedies reinforces a cost-effective and quality remediation.

267. The \$13,337.50 CFAC paid to MBS GeoConsulting, Ltd. is therefore a recoverable response cost.

B. South Percolation Ponds

268. The South Percolation Ponds are a series of three ponds located on the south end of the Site, adjacent to the Flathead River. (Baris.) Wastewater enters the South Percolation Pond system from a concrete pipe located on the west end of the pond system and flows from the pipe into the subsequent ponds through an unlined ditch. (Agreed ¶ 47; Ex. 134 at 55.)

269. The South Percolation Ponds received water from the sewage treatment plant, the aluminum casting contact chilling water, non-contact cooling water from the rectifier and other equipment, process wastewater from the casting mold cleaning and steam cleaning, non-process wastewater from the fabrication shop steam cleaning, and stormwater beginning in the early 1960s. (Agreed ¶ 48; Ex. 134 at 55.)

270. The South Percolation Ponds are “settlement ponds” intended to reduce solids in wastewater. Under the terms of its MPDES permit, CFAC could put authorized contaminants in the pond, but could not allow contaminants that were not authorized by the permit to escape, specifically the settled solids. (Williams; *see* Ex. 1004.)

271. In 1946, the Flathead River had a historical side channel where the ponds were constructed. (Stroiazzo; *see* Ex. 848 at 61.) In 1963, a dam was constructed on the eastern end. (Stroiazzo; *see* Ex. 848-62). Beginning in 2014,

the river began to naturally change its flow causing further erosion of the bank directly in front of the dam. (Stroiazzo.) Early signs of a potential issue were erosion at the “toe” of the dam and large, mature trees beginning to fall into the river. CFAC began to perform regular visual inspections to monitor the dam. (Stroiazzo.) CFAC first informed EPA of the pending problem in 2015.

(Stroiazzo.)

272. By 2016, aerial images show that the sandbar in front of the dam had disappeared and the river began to press directly against the face of the dam. (Stroiazzo; Ex. 848 at 65.) The dam severely eroded during every subsequent season, and in the high-water seasons of 2016, 2017, and 2018, the Flathead River inundated the ponds and severely damaged their eastern end. (Stroiazzo; Ex. 143 at 7.)

273. As noted in the Remedial Investigation Report, the ponds contained sediments contaminated with metals (such as barium) which EPA has deemed contaminants of concern. (See Ex. 134 at 100.) Seasonal erosion therefore presented a risk that the Flathead River could flood the ponds and wash these sediments into the main river itself. (Stroiazzo; Williams.)

274. There are two types of costs related to the South Percolation Ponds at issue here. First, in 2016 through 2018, CFAC constructed a sheet pile dam and riprap as a “stopgap” to address erosion and release concerns. Second, in 2020,

CFAC signed a separate Administrative Order on Consent with EPA to remove the temporary impoundment and return the dam and ponds to their natural state.

ARCO challenges costs related to the former but not the latter. As a result, the discussion below focuses on CFAC's "stopgap" efforts.

275. In August 2016, CFAC installed a sheet pile dam. (Stroiazso; *see* Ex. 848 at 66.) The proposal was discussed with EPA and MDEQ, and EPA concurred with efforts to move forward with a stopgap option. (Stroiazso.)

276. In 2017 and 2018, as a compliment to the steel pile dam, CFAC constructed a riprap wall approximately 10 feet inland from the then-existing bank of the dam. (Stroiazso; *see* Ex. 848 at 67.) Prior to doing so, CFAC considered whether further stabilization work was necessary and had Roux evaluate four alternatives, including a no action option. (Stroiazso; *see* Ex. 306 at 7.) CFAC ultimately concluded that stabilization work was necessary, and it could not wait for the full Remedial Investigation/Feasibility Study process to be completed for the Site. (Stroiazso.)

277. EPA was informed of these actions and stated that they "understand the urgency of this due to the riverbank conditions and timeframe constraints for the season." (Ex. 308; *see also* Ex. 309 (describing county's approval of activity as "good news"); Ex. 310 (expressing appreciation for efforts).) MDEQ was also kept informed and expressed its own appreciation. (*See* Ex. 315.) Stroiazso does

not recall any criticism from MDEQ or EPA regarding the temporary early work of either the steel pile dam or riprap. To the contrary, he testified that they supported and voiced a positive response.

278. CFAC conducted and completed these projects early and outside of the main river channel. This saved both time and cost, because CFAC did not have to implement other bank stabilization solutions in the Flathead River itself, which would have required substantial additional permitting and costly in-river construction techniques that would have delayed any remedy and caused more significant environmental concerns. (Stroiazzo.)

279. The sheet pile and riprap were both intended as stopgap measures to stabilize the bank, minimize the risk of further erosion, and prevent the unauthorized release of contaminated sediments from the South Percolation Ponds into the Flathead River. (Stroiazzo; Williams; *see also* Ex. 1004.) They were effective as stopgap measures. They were not, however, sufficient to address the long-term risk that a particularly strong high-water season could cause the ponds to be washed away, thereby releasing the pond's contaminated sediments into the Flathead River. (Stroiazzo.)

280. In EPA's and MDEQ's comments to the Feasibility Study Work Plan, EPA wrote that,

given the uncertainty regarding the long-term stability of the dam separating the Flathead River from the ponds, CFAC/Roux propose

early action at the South Percolation Ponds. Rationale for the need for early action was discussed during the conference call between EPA/MDEQ and CFAC on February 20, 2020 and is detailed in the meeting minutes. During the conference call, the project team agreed that, if feasible, an expedited schedule for the work is warranted to reduce the potential risk in the event of dam failure or extreme erosion.

(Ex. 1006; Stroiazzo.)

281. On July 22, 2020, CFAC and EPA entered a separate Administrative Order on Consent providing for the performance of an EPA-approved removal action by CFAC. (Ex. 143.) This Administrative Order on Consent recognized that prior inundation and erosion events required CFAC to undertake temporary measures pending a longer-term resolution of the problem. (Ex. 143 at 7.)

Pursuant to the Administrative Order on Consent, the final remedy would involve excavation of the sediments by CFAC and its contractor, thereby eliminating any risk of the river's being contaminated with barium or other metals classified by the Remedial Investigation Report as contaminants of concern. (*See generally* Ex. 143; Stroiazzo.)

282. In 2021, the ponds were excavated, the pipes leading to the pond were decommissioned, and the dam that formed the ponds was removed, allowing the Flathead River to reclaim that side channel. (Baris.) This required removal of both the sheet pile dam and riprap. (Baris.) The work was performed during Fall 2020 and Spring 2021 under the supervision of EPA pursuant to an Administrative Order on Consent. (Baris.) MDEQ and the public were also involved in the plan

and comment portions. The contaminated sediment was removed by truck and hauled to the Industrial Landfill. (Baris.)

283. As a result of CFAC's prior EPA-overseen temporary measures and the now-completed, EPA-approved final remedy, EPA will not be required to address South Percolation Ponds bank stabilization as part of a site-wide final remedy. (Muno.)

284. ARCO challenges the costs related to the "stopgap" measures on two grounds, first arguing that proper containment of the sediments within the ponds was a closure obligation and second arguing that because the dam and riprap had to be removed to implement the Administrative Order on Consent, they were not consistent with the final remedy as required by the National Contingency Plan. Neither argument is persuasive.

285. As to the closure obligation argument, ARCO insists that as the owner and operator of the Site, CFAC was obligated to properly close the South Percolation Ponds in a way that protected human health and the environment from the contaminated sludge and sediments that were and continue to be present in the ponds following CFAC's termination of industrial operations in 2009 and the termination of its MPDES discharge permit in 2019. But as Stroiazzo testified, the Flathead River began to change course in 2014, threatening the existing dam and

ponds in a way not previously apparent. The timing and nature of that threat took the necessary action beyond operation closure obligations.

286. As to ARCO's second argument, certain short-term actions ("removal actions") can be taken to address immediate releases or threatened releases of contaminated substances. 40 C.F.R. § 300.415. In such circumstances, action can include "[s]tabilization of berms, dikes, or impoundments . . . where needed to maintain the integrity of the structures." § 300.415(e)(3). Those actions, however, must "to the extent practicable, contribute to the efficient performance of any anticipated long-term remedial action with respect to the release concerned." § 300.415(d). Here, the sheet pile dam and riprap had to be removed when the South Percolation Ponds were fully excavated as part of the final remedial action. Contrary to ARCO's position, however, that does not make them inconsistent with one another. As opined by Muno, the stopgap measures were necessary to prevent the release and spread of contaminated sediments into the Flathead River. Put differently, the stopgap efforts were taken to contain the contamination until it could be addressed more permanently; the sheet pile dam and riprap achieved that goal. While ARCO may be correct that a more cost-effective approach would have been to fully excavate in the first instance, the National Contingency Plan does not require the most efficient action, simply one consistent with its mandate.

287. As Williams testified, the stabilization work was done to prevent unauthorized materials from entering the Flathead River. (Williams.)

288. Contrary to ARCO's argument, the "stopgap" efforts were consistent with the National Contingency Plan and are therefore recoverable response costs.

1. Morrison-Maierle, Inc.

289. CFAC seeks to recover \$402,471.73 it paid to Morrison-Maierle, Inc. for engineering services related to the stabilization and excavation of the South Percolation Ponds. (Exs. 581, 739.) Morrison-Maierle was CFAC's general contractor for the removal action. (Stroiazzo; *see* Ex. 836.)

290. According to Koch, only \$162,096.21 of this amount is consistent with National Contingency Plan, (*see* Ex. 1273), because Morrison-Maierle's work on the stopgap measures was not consistent with the final remedy, (*see* Ex. 1272 at 55–60).

291. Because the stopgap activities were consistent with the final remedy, as explained above, and ARCO's only other challenge to Morrison-Maierle's costs was lack of proof of payment, (*see* Ex. 1273), the total amount of \$402,471.73 is a recoverable response cost.

2. Montana Helical Piers

292. CFAC seeks to recover \$325,256.00 it paid to Montana Helical Piers for the 2016 sheet pile installation. (Exs. 579, 739.)

293. Because all of Montana Helical Piers' costs are associated with the stopgap measures and not the final remedy, Koch opines that they are not consistent with the National Contingency Plan and therefore not recoverable.

294. Based on the conclusion reached as to stopgap measures discussed above, the total amount of \$325,256.00 is a recoverable response cost.

3. Sandry Construction

295. CFAC seeks to recover \$977,533.63 it paid to Sandry Construction for its installation of the riprap; site grading; excavation; revegetation relating to stabilization and excavation of the South Percolation Ponds. (Exs. 701, 739.)

While the invoice summary totals \$1,424,716.50, (*see* Ex. 701 at 2), that improperly includes invoices that post-date the March 31, 2021 cutoff date.

296. According to Koch, only \$639,100.63 of this amount is consistent with National Contingency Plan, (*see* Ex. 1273), once again because work on the pre-Administrative Order on Consent stopgap measures was not consistent with the final remedy, (*see* Ex. 1272 at 71–72).

297. Based on the conclusion reached as to “stopgap” measures discussed above, and ARCO's only other challenge to Sandry Construction's costs was lack of proof of payment, (*see* Ex. 1273), the total amount of \$977,533.63 is a recoverable response cost.

C. Plant Demolition and Backfilling

298. CFAC also seeks to recover costs associated with the demolition of the Main Plant Building.

1. Calbag

299. The primary contractor for this work was Calbag Resources LLC (“Calbag”). In 2015, CFAC entered into agreements with Calbag for Calbag to take title and possession of, demolish, and remove certain facility structures and equipment. EPA did not review or approve any of those agreements. (Stroiazzo.) Calbag’s demolition and removal of the Main Plant buildings and the removal of asbestos and chemicals from those buildings was not part of any CERCLA investigation or response action, was not part of the remedial action selected by EPA for the Site and was not overseen or authorized by EPA. (Wright.)

300. CFAC and Calbag, however, entered into an Administrative Order on Consent with MDEQ governing the removal of SPL from the facility. (Agreed ¶ 51; Exs. 46–48 (agreements), 68 (Calbag Administrative Order on Consent).) Notably, however, that Administrative Order on Consent explicitly states that it “does not address the demolition and disposal of any building, structure, or equipment associated with aluminum processing or reduction at the Facility.” (Ex. 68 at 5.)

301. The 2015 Asset Purchase and Demolition Agreements contain detailed inventory of the items Calbag acquired. Specifically, Calbag acquired, among other items: the buildings and installations; aluminum and other metal materials inside or incorporated into the buildings and installations; the SPL and carbon in the decommissioned pots; “Universal Waste” (defined as batteries, pesticides, mercury-containing equipment, and bulbs lamps); asbestos set forth on the Asbestos Survey; lead-based paint; and fume dust. (Agreed ¶ 52; Ex. 45 at 2, 9; Ex. 47 at 2, 8; Doc. 91 at ¶ 20.)

302. In June 2016, MDEQ issued a Waste Management Plan for Calbag, which set forth the procedures governing the removal of various RCRA hazardous wastes, other hazardous substances, and solid wastes, including SPL (or K088), PCBs, asbestos-containing materials, and contaminated concrete, from the facility. (See Ex. 297; Stroiazzo.) CFAC was not a party to that Plan. (Stroiazzo.) The Plan provided that “CFAC may crush the concrete from the ground level floor, supports and other concrete structures to be used later as fill material. The regulatory levels that will determine what can be used as fill material will be made under a different regulatory program.” (Ex. 297 at 18.)

303. Calbag finished its work under the Asset Purchase and Demolition Agreements in the first quarter 2019. (Agreed ¶ 55; Doc. 91 at ¶ 28.)

304. CFAC seeks to recover costs for three types of service performed by Calbag: (1) asbestos abatement; (2) concrete crushing and backfilling; and (3) hazardous/solid waste disposal. In total, CFAC seeks to recover \$7,724,524.84. (Exs. 328, 739.)

305. At trial, CFAC conceded that the amount sought for asbestos abatement work, \$2,874,401.95, is foreclosed by the parties' 1988 Settlement. (See Ex. 1216 at ¶ 2.) This amount is therefore no longer being sought and is not recoverable.

306. CFAC is seeking recovery of \$4,598,500.00 in past costs for concrete crushing and backfilling in connection with the demolition of the Main Plant Buildings. To be recoverable, these activities must be necessary to the containment and cleanup of a release or threatened release of a hazardous substance. Costs that are undertaken for other reasons—such as routine maintenance or solely enhancing the use or value of a property—are generally not recoverable. *See Sealy Conn. Inc. v. Litton Indus., Inc.*, 93 F. Supp. 2d 177, 188–89 (D. Conn. 2000) (finding that decision to demolish building was based on business considerations and not remediation and so plaintiff could not recover demolition costs). That necessity determination, however, does not turn “on whether a party has a business or other motive in cleaning up the property, but whether there is a threat to human health or the environment and whether the

response action is addressed to that threat.” *Carson Harbor*, 270 F.3d at 872. Put differently, “[t]he issue is not why the landowner decided to undertake the cleanup, but whether it was necessary.” *Id.*

307. Here, there is no evidence that CFAC’s expenses for building decommissioning and demolition were a response to a release or threatened release of hazardous substances. In fact, the evidence suggests just the opposite.

308. Stroiazzo’s testimony made clear that the Main Plant Building had simply been abandoned when production stopped, describing it as if “someone turned off a switch and walked away.” The Main Plant Building was therefore in disrepair and needed to be demolished to recoup any value.

309. Nonetheless, demolition activities were not ordered by EPA and there is no basis to conclude that they ever would have been required as part of the CERCLA cleanup of the Site. Although CFAC presented evidence that EPA was asked to authorize Calbag’s plan for disposing of contaminated concrete, (*see also* Ex. 1003 (prohibiting on-site disposal of fluoride-contaminated concrete)), that was only after demolition had occurred. Calbag’s activities and their attendant costs appear to be the result of business decisions focused on positioning the property for future sale and use. While Muno testified that it is easier and less expensive to address potential threats to the health and environment earlier rather

than later, he puts the cart before the horse by ignoring CERCLA's "necessity" requirement.

310. Muno also testified that he believed the building would have been removed as part of a final remedy because it could not be used as anything else due to the "ubiquitous" contamination of the structure. Yet multiple witnesses testified that buildings are rarely removed during CERCLA actions, and generally it is only done if the structure prevents the removal of contaminated soils beneath the building. (Williams; Johnson; Jewett.) Here, CFAC presented no evidence that building removal was necessary to address contaminated soil beneath the structure. To the contrary, Baris testified that such removal was not necessary to address soil contamination. And, to the extent the concrete itself was contaminated, the record suggests such contamination only became an issue once demolition began and the concrete had to be moved. Additionally, CFAC's decision to backfill the basements of the former structure with concrete shows that if future soil removal were a cleanup goal, CFAC's actions were not consistent with that final remedy.

311. Moreover, the timing of the building demolition and correspondence regarding its purpose and progress indicate it was intended to enhance the future use or value of the property. While such a finding is not always contrary to necessity, it undermines necessity under the facts of this case.

312. Because CFAC fails to show that the demolition of the Main Plant Building was necessary to the cleanup, costs associated with the concrete removal and backfilling are not recoverable.

313. Finally, CFAC seeks to recover Calbag's costs related to certain waste disposal services, including disposal of hazardous substances (\$139,379.66), auction of debris (\$3,698.82), samples taken (\$3,100.20), "housekeeping" (\$21,2019.42), and waste disposal (\$84,344.79). As opined by both Williams and Koch, the removal and proper disposal of hazardous substances from the Main Plant Building at the time of closure was CFAC's obligation as the owner and operator of the plant. While such costs are not necessarily mutually exclusive of recoverable costs under CERCLA, CFAC fails to show how these activities would have been necessary had it not made the business decision to demolish the Main Plant Building. They are therefore not recoverable response costs.

2. Aqua Terra Restoration

314. CFAC seeks to recover \$101,459.00 paid to Aqua Terra Restoration for work involved with reclamation of a borrow pit onsite and obtaining additional clean backfill therefrom to fill the basements, tunnels, and cavities at the Site left by CFAC's crushing and removal of concrete. (Exs. 386, 739; Stroiazzo.)

315. According to Koch, none of this amount is consistent with National Contingency Plan, (*see* Ex. 1273), because it is related to facility decommissioning

not cleanup, (*see* Ex. 1272 at 6). Because Koch is correct, none of this amount is a recoverable response cost.

D. Removal of Hazardous Materials and Wells

316. CFAC also seeks to recover costs associated with removing hazardous waste that remained on the Site following the closure of the facility, as well as the decommissioning of certain existing groundwater wells.

317. This presents a closer question than the Plant demolition because there is no dispute that these materials would need to be removed as part of the CERCLA final remedy even if the Plant building remained in place. While ARCO insists CFAC had an obligation as an operator to remove these materials at the time the facility closed, Williams conceded that operator obligations and response costs are not always mutually exclusive so long as the requirements of the National Contingency Plan are met. Because removal of these materials was necessary to the cleanup action and consistent with the National Contingency Plan, the associated costs are recoverable. The costs associated with the well removal performed by MWC Viking Pump, however, are not.

1. Mountain States Environmental Services, Inc.

318. CFAC subcontracted with Mountain States Environmental for “[o]ffsite waste disposal of drums containing hazardous substances.” (Doc. 91 at ¶¶ 36, 38.) Mountain States removed as part of plant decommissioning drums

containing, among other chemicals, transformer oil, pyrotek, L-30, fire extinguisher powder, joint compound, and fire-fighting foam concentrates in 2018-2019. (Doc. 91 at ¶ 37; Agreed ¶ 54.)

319. CFAC seeks to recover \$20,925.00 it paid to Mountain States for this work. (Exs. 588, 739.)

320. According to Koch, only \$1,250.00 of this amount is consistent with the National Contingency Plan, (*see* Ex. 1273), because the remaining amount is related to the facility decommissioning, (*see* Ex. 1272 at 60). But, as discussed above, this activity is distinguishable from the Plant demolition and necessary to the cleanup.

321. Because ARCO's only other challenge to these costs was lack of proof of payment, (*see* Ex. 1273), the total amount of \$20,925.00 is recoverable.

2. IRS Environmental

322. CFAC seeks to recover \$64,989.00 paid to IRS Environmental for removal and disposal of capacitors containing PCBs. (Exs. 544, 739; Stroiazzo.)

323. According to Koch, none of this amount is consistent with National Contingency Plan, (*see* Ex. 1273), because it is related to operator obligations during the closure of a facility and certain work (\$15,000 worth) had yet to be performed, (*see* Ex. 1272 at 50; Ex. 545).

324. As discussed above, the fact that CFAC should have removed these materials as part of its closure of the facility does not disqualify them as response costs. However, Koch is correct regarding the \$15,000 reduction noted on the invoice, (*see* Ex. 545), so only \$49,980.00 is a recoverable cost (note that despite CFAC requesting \$64,989.00 for this invoice, the invoice is only for \$64,980.00, a \$9 difference).

3. MWC Viking Pump

325. CFAC seeks to recover \$34,632.00 paid to MWC Viking Pump on October 14, 2017 for its dismantling of five water production wells and fabrication and installation of extended well, salvage valves, and fittings. (Exs. 592, 739; Stroiazzo.) According to CFAC, these wells need to be removed because they could have become contaminated with hazardous substances if left in place. (Stroiazzo.)

326. According to Koch, none of this amount is consistent with National Contingency Plan, (*see* Ex. 1273), because it is related to operator obligations during the closure of a facility, (*see* Ex. 1272 at 60).

327. While closure obligations do not necessarily disqualify a cost from compliance with the National Contingency Plan, there is no evidence that the removal of these wells would have been required under the CERCLA cleanup or a final remedy. As a result, they are not recoverable costs.

E. Public Relations

328. The National Contingency Plan requires private parties to provide opportunities for meaningful public comment concerning selection of a CERCLA response action. 40 C.F.R. § 300.700(6).

329. CFAC has held Community Liaison Panel meetings since 2015 which were open to the public, at which the public was informed about developments concerning and progress in cleaning up the Site, and at which CFAC took questions from the public regarding the cleanup. CFAC also received EPA's feedback on draft agendas for Community Liaison Panel meetings. (*See Exs. 287–89, 292, 295, 299, 300 (meeting minutes).*) EPA approved the agendas for these meetings. (*Stroiazzo.*) During these meetings, *Stroiazzo* and *Otis* updated the public on current activities at the Site and took questions and comments.

1. Allegra Marketing

330. CFAC seeks to recover \$2,751.70 for printing public newsletters and public-facing materials by Allegra Marketing. (*Stroiazzo; Exs. 739, 832.*) Because ARCO's only challenge to these costs was lack of proof of payment, (*see Ex. 1273*), the full amount of \$2,751.70 is recoverable.

2. Ann Green/Mary Green Communications

331. CFAC seeks to recover \$515,680.19 it paid to Ann Green Communications and Mary Green Communications (referred to collectively as "Green Communications" where appropriate) for public relations consulting and

communications services. (*See* Exs. 330, 739.) Ann Green retired during the Remedial Investigation process and was replaced by her daughter, Mary Green. (Otis.)

332. Green Communications' work included arranging the Community Liaison Panel meetings, drafting public-facing materials for the Community Liaison Panel meetings and CFAC Project Updates, and interfacing with local stakeholders and public officials. (Stroiazzo; *see* Exs. 209, 293, 1228 (project updates).) Green Communications also maintained an informational website about the Site, <http://www.cfacproject.com>, and a 1-800 informational telephone number; organized and held multiple open-house site tours of the Site, which were open to the public; provided routine in-person project updates to federal, state, and municipal entities; and received guidance and direction from the EPA Public Relations Project appointed official assigned to this remediation. (Stroiazzo; *see, e.g.*, Ex. 843 (slides for presentation).)

333. According to Koch, only \$380,611.01 of the requested amount is consistent with the National Contingency Plan. (*See* Ex. 1273.) Although Koch provides specific reasons for rejecting individual entries, (*see* Ex. 1272 at 1–6), most of her excluded costs are based on the fact that many of invoices (principally those from Mary Green Communications) do not include a summary of services but merely state the individual who performed the work and the number of hours

billed. (*Compare* Ex. 336 with Ex. 376.) In response, CFAC did not offer additional documentation from Green Communications about the work performed; rather, Andrew Otis, CFAC's regulatory compliance attorney, testified that the work and services performed by Green Communications remained the same across the entire Remedial Investigation process regardless of the detail provided in a particular invoice. (Otis.) The question then is whether this is sufficient evidence to meet the "accurate" documentation requirement of the National Contingency Plan. *See* 40 C.F.R. § 300.16(a)(1). It is not.

334. If Green Communications was only performing work related to the cleanup, then Otis's testimony would likely be sufficient to show recoverable costs. However, invoices with detailed entries show that not all Green Communications' time is related to the cleanup of the Site. For example, in a May 2017 invoice, Ann Green Communications includes numerous hours related to the "Gateway Project," which is general "PR" for CFAC unrelated to the cleanup. (*See* Ex. 358 at 4.) There are also numerous entries related to the facility decommissioning.

335. Because it cannot be assumed that Green Communications' generalized work was associated with response action, CFAC's evidence only supports a finding that \$380,611.01 of the costs related to Green Communications are recoverable response costs.

3. Haley Beaudry

336. CFAC was billed \$59,564.40 for public relations consulting and communications services by Haley Beaudry through November 2015, which included preparation of materials for Community Liaison Panel meetings, interface with public officials and stakeholders concerning the Site's listing on the National Priority List, and communications regarding well sampling. (Exs. 510, 739; Stroiazzo.)

337. According to Koch, only \$32,102.60 of the requested amount is consistent with the National Contingency Plan. (*See* Ex. 1273.) Koch testified that CFAC should not be permitted to recover for Beaudry's work related to (1) CFAC's opposition to the National Priority List listing; (2) general "PR" for CFAC; and (3) work related to other non-recoverable costs (such as building decommissioning). (*See* Ex. 1272 at 40–42.) All three challenges are sustained. CFAC's contention that opposing National Priority List listing could contribute to the cleanup defies logic.

338. Based on the above, only \$32,102.60 of the costs related to Haley Beaudry are recoverable response costs.

4. Jacob Hall Design

339. CFAC seeks to recover \$500 for design and maintenance of the current CFAC website by Jacob Hall Design. (Stroiazzo; Exs. 739, 833.)

However, only \$400.00 of the amounts invoiced was billed prior to March 31, 2021. (*See Ex. 833.*)

340. Because ARCO's only other challenge to these costs was lack of proof of payment, (*see Ex. 1273*), the reduced amount of \$400.00 is recoverable.

5. Sard Verbinnen & Co.

341. CFAC seeks to recover \$40,000.00 for public relations consulting and communication services by Sard Verbinnen & Co. (*Exs. 739, 837.*) While CFAC alleges that this work involved community outreach and outreach to federal, state, and municipal entities, (*see Doc. 125 at ¶ 260*), the single-page invoice provides no description of the services provided, nor did CFAC present any testimony on this matter at trial. CFAC has therefore not shown that these are recoverable costs under CERCLA.

F. Attorney Fees

342. Whether attorney fees may be recoverable under CERCLA depends on whether the fees are for litigation- or remediation-based services. *Key Tronic Corp. v. United States*, 511 U.S. 809, 819–20 (1994). Litigation fees, which can include time spent on negotiations between EPA and a private party, are not recoverable. *Id.* at 820. On the other hand, “lawyers’ work that is closely tied to the actual cleanup” that “significantly benefit[s] the entire cleanup and serve[s] a statutory purpose apart from the reallocation of costs” may be recoverable. *Id.*

Recoverable expenses include those for services akin to those performed by “engineers, chemists, private investigators, or other professionals who are not lawyers.” *Id.* “These kinds of activities are recoverable costs of response clearly distinguishable from litigation expenses.” *Id.* For example, “work performed in identifying other PRP’s falls into this category.” *Id.* This exception is narrowly interpreted. *See, e.g., Fireman’s Fund Ins. Co. v. City of Lodi*, 302 F.3d 928, 953 (9th Cir. 2002); *City of Seattle v. Monsanto Co.*, 387 F. Supp. 3d 1141, 1158 (W.D. Wash. 2019).

343. CFAC seeks to recover \$708,872.48 in attorney fees paid to three different law firms beginning in March 2013 and continuing into 2021. (Exs. 712, 739.) In doing so, CFAC has divided the work performed by the attorneys into five categories: (1) Pre-Remedial Investigation/Feasibility Study activities; (2) Review and Implementation of Remedial Investigation/Feasibility Study; (3) Public Outreach and Communication; (4) Facility Demolition and Removal; and (5) South Percolation Ponds Stabilization. (*See Ex. 712.*)

344. Because demolition costs are not recoverable as discussed above, the attorney fees associated with Category 4, totaling \$21,929.73 are not recoverable.

345. CFAC’s remaining service categories are more difficult to assess as the category titles alone do not provide sufficient detail to determine the nature of the work and whether it would be considered a CERCLA response cost under *Key*

Tronic and subsequent Ninth Circuit law. For that reason, it is necessary to consider specific time entries with work descriptions cataloged in Ex. 712-1.

346. ARCO's expert Koch testified that none of the attorney fees requested are consistent with the National Contingency Plan because the descriptions of the services performed by these law firms do not mention any work related to identifying other PRPs. And, indeed, no such work is required at this Site because there have been only two owners/operators of the Site, CFAC and ARCO, both of whom are readily identifiable and known to one another. Nor does Koch believe there are any work descriptions meeting the Supreme Court's *Key Tronic* exception: "work that is closely tied to the actual cleanup" that "might well be performed by engineers, chemists, private investigators, or other professionals who are not lawyers" and that "significantly benefited the entire cleanup effort and served a statutory purpose apart from the reallocation of costs." *Key Tronic*, 511 U.S. at 820; (*see* Ex. 1273). For example, Koch identified numerous descriptions of work entirely unrelated to the CERCLA cleanup effort, such as: work on closing down the aluminum reduction works and disposition of the Site and internal lawyer conferences, including conferences with and among CFAC trial counsel, and lawyers' telephone calls, meetings and travel concerning undisclosed subjects or containing generic references to "strategy."

347. Koch testified that other work descriptions also concern efforts to protect CFAC from CERCLA and CECRA liability or to manage that liability, such as work on: CFAC's response to EPA's CERCLA § 104(e) information request; CFAC's privilege log for its CERCLA § 104(e) response; an aborted negotiation of an Administrative Order on Consent with MDEQ; financial assurance to be provided by CFAC; negotiating Administrative Order on Consents with EPA; reviewing draft and final technical and public relations documents; reviewing and advising on responses to agency comments; interviewing potential consultants; making Freedom of Information Act requests to EPA; reviewing EPA's costs claims and identifying costs to challenge; and negotiating with EPA on draft technical documents. Koch is correct that fees for such work are excluded by *Key Tronic* because they seek to protect CFAC's interests as a PRP or to reallocate costs from CFAC to ARCO.

348. Moreover, Andrew Otis, CFAC's regulatory counsel, testified that his work for CFAC went beyond cleanup efforts, describing his services broadly as "strategic" assistance.

349. Additionally, Koch persuasively testified that while some of the tasks performed by the attorneys could possibly be associated with the cleanup, paying attorney rates for such activity is not cost efficient under CERCLA.

350. As a result, fees requested for Categories 1, 2, 3, and 5 (\$686,942.75) are not recoverable in full. Nevertheless, review of the attorneys' individual time entries shows that they spent time on non-litigation related activities associated with the CERCLA cleanup and that it was cost efficient for the attorneys to be involved in those tasks. For example, time spent working on public outreach and meeting and getting the necessary permits for the South Percolation Pond stopgap action.

351. Moreover, the inclusion of these specific entries makes this different from the costs associated with Green Communications, discussed above, and Glencore's internal employees, discussed below. For counsel, CFAC met its burden of providing accurate documentation of the work performed.

352. Accordingly, 30% of CFAC's requested attorney fees (minus those spent on decommissioning) are deemed recoverable, for a total of \$206,082.82.

G. Glencore/CFAC Employees

353. CFAC also seeks to recover for the salaries and expenses of two corporate employees involved with the cleanup effort, John Stroiazzo and Steve Wright. CFAC seeks to recover \$1,288,190.64 related to these costs. (Ex. 484, 739.) According to Otis, Stroiazzo "led" CFAC's team and Wright's knowledge was "critical" to developing the Remedial Investigation/Feasibility Study. (Otis.)

354. EPA often seeks to recover its own internal employee costs as response costs. *See, e.g., United States v. Chapman*, 146 F.3d 1166 (9th Cir. 1998). But EPA supports such claims with detailed evidence. *Id.* at 1171 (explaining that EPA provided court with “detailed cost summaries,” “declarations from EPA staff, attorneys, accountants, and supervisors attesting to the work they performed and the time spent,” and “extensive documentation of costs in the form of timesheets and payroll documents”). Few courts have considered the recoverability of private party internal employee costs when “the labor was expended on matters addressed to the threat to human health created by the release of a hazardous substance.” *Santa Clara Valley Water Dist. v. Olin Corp.*, 655 F. Supp. 2d 1066, 1072 (N.D. Cal. 2009). At a minimum, the private plaintiff bears the burden of proving that these internal costs are for labor undertaken to perform the cleanup and not part of the plaintiff’s ordinary business. *Id.*

355. The primary dispute over these costs is that neither Stroiazzo nor Wright kept detailed time sheets; instead, both individuals seek to recoup a percentage of their overall salary or compensation (plus expenses, (*see* Ex. 484)). ARCO insists that this does not meet the documentation requirements under CERCLA. *See* 40 C.F.R. § 300.16(a)(1) (requiring an “accurate accounting” of costs for recovery under CERCLA). That argument is persuasive.

356. As an initial matter, it is undisputed that both Stroiazzo and Wright performed work relevant to the cleanup action including such activity as coordinating public meetings and overseeing sampling efforts, the cost of which would generally be recoverable under the National Contingency Plan. But that is all the record shows. While both Stroiazzo and Wright testified to the percentage of their time they believe they devoted to cleanup work, the actual timeline of the Site and their expenses indicate numerous activities related to CFAC's corporate goals and permits and unrelated to the cleanup. Additionally, both testified to work spent on the present litigation, which is not recoverable.

357. Ultimately, CFAC has failed to meet its burden of keeping an accurate accounting of the labor costs associated with the cleanup. *See City of Wichita v. Trs. of APCO Oil Corp. Liquidating Trust*, 306 F. Supp. 2d 1040, 1095–96 (D. Kan. Dec. 31, 2003) (declining to award employee salaries because “no one kept any sort of contemporaneous records regarding how much time each employee devoted to . . . response actions”).

358. That conclusion is only strengthened when any effort is made to actually apply a percentage recovery to either Wright or Stroiazzo or review their expenses. As argued by ARCO, numerous expenses are tied to non-cleanup activities such as the MPDES permit and appeal.

359. CFAC has not met its burden to prove that the internal employee costs it claims are recoverable as CERCLA response costs.

H. Costs Barred By Agreement

360. ARCO further argues that certain recovery costs—past and future—are barred by the terms of the parties’ agreements. While ARCO is correct regarding asbestos-related costs, its argument regarding smelter operations is not persuasive.

361. As discussed above, CFAC expressly waived and released ARCO from all claims with respect to asbestos-containing materials at the Site in the 1988 Settlement. Accordingly, CFAC cannot recover any alleged costs related to the presence and remediation of asbestos at the Site, including approximately \$2.85 million for past asbestos abatement in the plant buildings and approximately \$450,000 for future improvements to soil covers at the Asbestos Landfills. (*See* Ex. 868 at 513.)

362. ARCO insists, however, that even if CFAC does not owe ARCO a complete indemnity for all damages, losses, and out-of-pocket expenses alleged in this case, including those resulting from events or conditions in existence prior to September 17, 1985, CFAC still must indemnify ARCO for such damages and expenses to the extent they “aris[e] ... out of obligations or liabilities” that “relat[e] to the operation of the Smelter Business” after that date. (Ex. 1 § 10(b)(iii).) The

Acquisition Agreement is not ambiguous on this point, and CFAC has acknowledged this obligation.

363. The Acquisition Agreement defines “Smelter Business” as “the business associated with Seller’s Columbia Falls, Montana aluminum smelter.” (Ex. 1 at Preamble.) It explains that the phrase “relating to the Smelter Business” is “intended to designate those . . . liabilities that . . . are associated with the conduct of the Smelter Business.” (Ex. 1 at § 1(a).)

364. According to ARCO, that language prevents CFAC from recovering any costs related to the Main Plant demolition; the Percolation Ponds; the Former Drum Storage Area; the East, Industrial, and Sanitary Landfills; and the WSSP. That argument fails.

365. For the Main Plant Building, as discussed above, CFAC’s demolition costs are not recoverable under CERCLA. As a result, there is no outstanding indemnity related to these costs.

366. For the remaining Site areas, ARCO attempts once again to read “relating to Smelter Business” as an assumption of environmental liability by CFAC. While CFAC undeniably had certain obligations to close the facility properly, the analysis above shows that that indemnity does not extend to pre-existing environmental contamination. The record shows that ARCO disposed of hazardous waste water—such as pot soaking liquid—in the Percolation Ponds

during its operation of the facility. (*See* Ex. 868 at 24–25.) Both entities also used the Former Drum Storage Area, (*see* Ex. 209 at 63); the East, Industrial, and Sanitary Landfills, (*see* Ex. 868 at 23); and the WSSP, (*see* Ex. 868 at 22). CFAC is therefore not required under the terms of the Acquisition Agreement to indemnify ARCO for the cost of cleaning up these Site areas as part of a broader CERCLA cleanup of Site conditions, including those conditions that pre-dated CFAC’s acquisition of the facility.

367. The result would potentially be different, however, if ARCO had shown that there was a Site area used solely by CFAC in its operation of the facility. The cleanup of that area would then be solely attributable to CFAC’s operation of the Site. To the contrary, however, ARCO has repeatedly argued that the waste streams produced by the parties are not segregable.

368. Ultimately, the parties’ agreements only bar recovery of costs related to asbestos; the remaining Site costs are not subject to the indemnity terms.

VI. EQUITABLE ALLOCATION

369. In addition to allowing private parties to sue for cost recovery, CERCLA also authorizes a responsible party who has incurred liability to bring an action for contribution against any other potentially responsible party. *See* 42 U.S.C. § 9613(f)(1). “In resolving contribution claims, the court may allocate response costs among liable parties using such equitable factors as the court

determines are appropriate.” *Id.* “CERCLA does not limit the equitable factors a court may consider.” *AmeriPride Servs. Inc. v. Tex. E. Overseas Inc.*, 782 F.3d 474, 480 (9th Cir. 2015). A court need not allocate response costs to a “mathematical certainty,” but can “apply general principles of fairness and equity and deciding whether to err on the side of over- or under-compensation.” *Asarco LLC v. Atl. Richfield Co., LLC*, 975 F.3d 859, 869 (9th Cir. 2020). Courts are not required to allocate costs based on a pro-rata calculation. *W. Props. Serv. Corp. v. Shell Oil Co.*, 358 F.3d 678, 690 (9th Cir. 2004) (“Section 113 is not a contribution scheme in which each joint tortfeasor bears a pro rata share of the loss regardless of its degree of fault.”), *abrogated on other grounds by Kotrous v. Goss-Jewett Co. of N. Cal.*, 523 F.3d 924 (9th Cir. 2008).

370. While there are multiple lists of potential equitable allocation factors, many courts start with a core set of non-exclusive considerations known as the “Gore factors.” *See Boeing Co. v. Cascade Corp.*, 207 F.3d 1177, 1187 (9th Cir. 2000); *Asarco LLC*, 975 F.3d at 869. The Gore factors are: (a) the ability of the parties to demonstrate that their contribution to a discharge, release or disposal of a hazardous waste can be distinguished; (b) the amount of the hazardous waste involved; (c) the degree of toxicity of the hazardous waste involved; (d) the degree of involvement by the parties in the generation, transportation, treatment, storage, or disposal of the hazardous waste; (e) the degree of care exercised by the parties

with respect to the hazardous waste concerned, taking into account the characteristics of such hazardous waste; and (f) the degree of cooperation by the parties with the Federal, State or local officials to prevent any harm to the public health or the environment. *TDY Holdings, LLC v. United States*, 885 F.3d 1142, 1146 n.1 (9th Cir. 2018).

371. Ultimately, the parties' both propose an allocation that starts with the Gore factors but emphasizes different considerations. CFAC's proposed allocation focuses primarily on aluminum production and waste volumes, with individual allocations for different areas of the Site. ARCO proposes a site-wide allocation that focuses on the parties' understanding of their respective environmental liabilities (i.e., the indemnification provision of the 1985 Acquisition Agreement) and the economic benefits realized. Based on the proof presented at trial, a site-wide allocation based on considerations proposed by both parties is appropriate.

A. CFAC's Proposed Allocation

372. CFAC proposes the methodology of its expert David Batson, who has developed a three-phased allocation. In the first two phases, Batson determines a "baseline" allocation by looking at the first four Gore factors to identify the creation of the risk and how it is managed. In the third phase, Batson considers other equitable factors beyond the initial risk creation, which are typically reflective of the last two Gore factors.

373. In developing a “baseline” under this model, Batson first determines the actual quantity of waste that was deposited by each party onto discrete Site areas. This is known as the “disposal risk contribution.” Given the available data, this calculation is possible for four Site areas: the West Landfill, the WSSP, the Center Landfill, and the East Landfill. For the rest of the Site, where contaminant volume information is not available, Batson uses the parties’ respective aluminum production as a proxy or surrogate for waste disposal, adjusted for years of operation in each Site area.

374. After establishing the disposal risk in a relative percentage, Batson then considers the ongoing responsibility for the management of the Site and the waste in what is known as “maintenance risk.” This part of the calculation considers actions taken by the parties that either increase risk (e.g., failing to line or cap landfills) or decrease risk (e.g., lining, capping, or excavating landfills).

375. Finally, Batson turns to other equitable factors, such as the care exercised by a party and its cooperation with cleanup authorities. These considerations are written into the allocation as a positive or negative offset. Here, Batson determined the parties were equal in the level of care exercised but proposes an equitable adjustment in CFAC’s favor (5%) for its cooperation with EPA throughout the Remedial Investigation/Feasibility Study process.

376. Using Batson’s model, CFAC’s proposed allocation assigns the following percentage by Site area:

FINAL PROPOSED ALLOCATIONS

	<u>ARCO</u>		<u>CFAC</u>	
	Baseline Share	Equitable Adjust.	Baseline Share	Equitable Adjust.
West Landfill	95.9%	+ 2.5% = 98.4%	4.1%	- 2.5% = 1.6%
Wet Scrubber Sludge Pond	89.7%	+ 2.5% = 92.2%	10.3%	- 2.5% = 7.8%
Center Landfill	100.0%	+ 2.5% = 100.0%	0.0%	- 2.5% = 0.0%
East Landfill	62.1%	+ 2.5% = 64.6%	37.9%	- 2.5% = 35.4%
Industrial Landfill	18.5%	+ 2.5% = 21.0%	81.5%	- 2.5% = 79.0%
Asbestos Landfills	26.4%	+ 2.5% = 28.9%	73.6%	- 2.5% = 71.1%
Former Drum Storage Area	31.4%	+ 2.5% = 33.9%	68.6%	- 2.5% = 66.1%
Soils N of Main Plant Bldg	52.9%	+ 2.5% = 55.4%	47.1%	- 2.5% = 44.6%
NW/NE Percolation Ponds	48.7%	+ 2.5% = 51.2%	51.3%	- 2.5% = 48.8%
South Percolation Ponds	52.9%	+ 2.5% = 55.4%	47.1%	- 2.5% = 44.6%
Groundwater	94.9%	+ 2.5% = 97.4%	5.1%	- 2.5% = 2.6%

(Ex. 812.) For Site-wide remedial costs, CFAC proposes a baseline equitable allocation of 52.9 percent to ARCO and 47.1 percent to CFAC, which reflects the parties’ aggregate aluminum production volumes.

377. Ultimately, while the Court is persuaded that ARCO’s disposal of SPL in the unlined West Landfill is a primary cause of groundwater contamination on the Site—and thus a driver of remediation costs—considerations beyond the

parties' waste disposal and production volumes favor a Site-wide allocation as discussed below. Moreover, parts of Batson's proposed methodology are questionable, as is its application here; those concerns are outlined below.

378. First, Batson's allocation places the maximum cost burden on the opposing party. As ARCO points out, Batson's allocation was rejected by the court in *El Paso Natural Gas Company, LLC v. United States*, 390 F. Supp. 3d 1025 (D. Ariz. 2019), the single other case where Batson's proposed methodology was subjected to judicial review. In that case, Batson based his allocation methodology on the volume of soil moved during each phase of a mining operation, ultimately assigning 86.77% of the liability to the United States and 13.23% of the liability to his client, El Paso. *Id.* at 1049–50. Considering all the facts surrounding the operation, that court rejected Batson's opinion and found “El Paso's proposed allocation to be quite unreliable—contrived to assign maximum responsibility to the United States.” *Id.* at 1052.

379. Here, Batson was specifically asked whether he considered the cost of remediation in proposing his allocation ratios. More specifically, ARCO pressed him because his allocation gave the lion's share of the responsibility to certain cost driving site conditions, such as groundwater remediation, meaning ARCO would end up carrying most of the cost. Batson denied that cost was a relevant consideration, regardless of which party it favored. While Batson's response

appears genuine, it highlights a shortcoming of his methodology: equitable allocation is about more than just the volume of waste produced. As discussed in more detail below, allocation in this case requires consideration of numerous qualitative factors, many not considered by Batson.

380. Second, Batson's groundwater allocation, arguably the most important in the case, diverges somewhat from the evidence presented at trial. Batson's allocation percentages assigned to the groundwater at the Site are derivative of the percentages assigned to the West Landfill (40%), WSSP (40%), and Center Landfill (20%). But, as argued by ARCO, this oversimplifies the waste streams on the Site. While the Remedial Investigation/Feasibility Study process identified the West Landfill and WSSP as the "primary" contributors, it also identified the Center Landfill and the Former Drum Storage Area as "secondary" contributors. (*See Ex. 868 at 22.*) Under Batson's site allocations, ARCO has the much higher percentage of responsibility for the West Landfill, the WSSP, and the Center Landfill; it does not, however, for the Former Drum Storage Area. Yet the Former Drum Storage Area is not considered in Batson's groundwater baseline. While Batson correctly pointed out during cross-examination that the Former Drum Storage Area may only be superficially contributing to the groundwater contamination, the appropriate way to address that contribution is by including a percentage of the Former Drum Storage Area into the groundwater allocation,

however minimal. It is not reasonable, however, to simply omit this contributing feature. While the impact in this area may be minor, it raises the concern that other waste streams may be oversimplified under Batson's method.

381. For example, Batson did not distinguish between toxicity of waste streams by each party; rather, he assumed both parties' disposals had the same impact on the groundwater. For some Site areas—where the parties' discharges are not segregable—such an assumption is reasonable. The WSSP, however, is a different story. *See Gavora, Inc. v. City of Fairbanks*, 2017 WL 3161626, at *8 (D. Alaska July 25, 2017) (concluding “degree of toxicity” is “most relevant when there are two types of discharges by two distinct actors, and one discharge is more toxic than the other”). ARCO only ever put calcium fluoride sludge and chemically treated leachate on the WSSP. This is important because, as recognized by CFAC's expert Baris, the sludge has a low solubility and is essentially “inert.” (*See Ex. 61.*) Thus, under Batson's calculation, ARCO is held responsible for 91 million gallons of an inert substance of low solubility.

Sampling also indicates that any cyanide disposed of by ARCO on the WSSP was chemically treated, reducing it to below background levels. (*See Ex. 89.*) CFAC, on the other hand, disposed of leachate with cyanide concentrations above background levels, (*see Ex. 56*), and disposed of carbon cathode through pot diggings. Instead of increasing CFAC's responsibility for that illegal discharge

(the carbon cathode), however, CFAC was given an offset under Batson's equation for eventually removing it.⁵ While the failure to distinguish between waste streams for the remediation of the WSSP alone would potentially be reasonable, the same rationale does not flow through to the groundwater. While ARCO may have disposed of more volume of waste at the WSSP, the evidence does not show that ARCO's waste at that location was more responsible for the groundwater contamination simply due to its volume.

382. Finally, there are several things Batson's allocation does not consider. For example, he did not consider the language of the parties' indemnity agreement nor the fact that CFAC acquired the facility for \$1 but could sell it for much more (as discussed below). Additionally, while Batson's allocation ratios are tied to 12 site features, those features are going to be remediated in specific groupings, or Decision Units. Batson does not explain how disputes over which costs go to which allocations under the Decision Unit system would be determined or remedied. This disconnect makes the practical implementation of his cost ratios difficult, if not impossible.

383. While some of Batson's proposed considerations are reasonable and relevant, his ultimate recommendation of an area-by-area allocation is not.

⁵ Such credit was at least given in Batson's original allocation; the trial testimony is somewhat confusing as to whether this credit was included in his final calculation.

B. ARCO's Proposed Allocation

384. ARCO, on the other hand, did not proffer expert testimony on the issue of allocation, but through its trial briefing proposes a site-wide allocation on the ground that the parties' Site operations are comparable, meaning the Court should rely on other considerations to drive its allocation determination; such considerations include (a) the terms of the parties' contract and (b) the financial benefits the parties gained from ownership and operation of the facility and will gain from remediation of the Site.

385. Batson disagrees that a site-wide allocation is appropriate, citing the fact that while the production activity and waste streams were similar, the individual actions of the parties' regarding risk driving factors—such as volume of waste disposed of—are known. According to Batson, a site-wide allocation would ignore the facts on the ground. Batson conceded, however, that many sites have been given site-wide allocations, even those with complex operational histories.

C. The Court's Allocation

386. Considering the evidence presented by the parties and the guidance provided by the caselaw, a Site-wide allocation is appropriate here. Based on the factors discussed below, that allocation is 65% CFAC and 35% ARCO.

1. The Gore Factors

387. As recognized by Batson and in other equitable allocation caselaw, it is appropriate in this case to begin with the Gore factors.

i. Site Operations and Contribution to Waste Streams

388. The first four Gore factors address the amount and nature of the hazardous waste disposed of by the parties.

389. The historical record in this case is unique in that it includes extensive documentation about the parties' waste disposal practices, allowing for a fairly accurate assessment of the parties' respective contributions. That record also contains information about the general volumes of waste, its relative toxicity, and during which time periods disposal occurred. As argued by CFAC, ARCO's disposal of 61,800 tons of SPL in the unlined West Landfill prior to 1980 stands out as a primary contributor to Site contamination. That is especially so given the fact that CFAC only ever disposed of SPL in the lined East Landfill and, starting in 1990, disposed of all SPL off-Site.

390. Nevertheless, the high cost of remediation tied to Landfills DU1 and Groundwater DU is directly connected to the joint remediation of the West Landfill and the WSSP. The most expensive remedial alternative for Landfills DU1 proposes the construction of a slurry wall that would encompass—either partially or fully—both the West Landfill and the WSSP. Given the relative sizes of the two Site features, more than half of that would be attributable to the WSSP. (Baris.) As discussed above, both parties disposed of hazardous waste on the WSSP. Thus, while ARCO may be responsible for the lion's share of the

groundwater contamination, the remedial action addresses Site features used by both parties. Thus, the high cost of remediating those areas cannot be attributed to ARCO alone.

391. Additionally, both parties engaged in daily operations resulting in cyanide and fluoride byproducts. And CFAC is independently responsible for the waste disposed of at the other on-Site landfills and Former Drum Storage Area.

392. The proof at trial shows the parties operated the same facility for similar amounts of time. They produced the same product, in similar quantities. They produced the same waste streams and waste by-products. While the Remedial Investigation/Feasibility Study process indicates that ARCO's disposal of SPL in the West Landfill is a primary driver of continued groundwater contamination, the record shows that such contamination is also linked to the WSSP and the Former Drum Storage Area, both sites used by CFAC.

393. Accordingly, the first four Gore factors do not weigh in favor of either party.

ii. Degree of Care

394. Another equitable factor is the degree of care exercised by each party with respect to the hazardous wastes at issue. While this is a relevant factor here, the trial record shows this factor weighs only slightly in favor of allocating more responsibility to CFAC.

395. As Williams testified, and Muno conceded, even though ARCO placed SPL in an unlined landfill, ARCO operated the facility in accordance with prevailing environmental practices. For example, SPL was not regulated as a RCRA hazardous waste at any time during ARCO's ownership and operation of the Site. Moreover, a 1983 EPA report indicates that only 0.3% of active landfills had liners and EPA surveys from 1975 to 1978 further indicated that 78% of hazardous waste in the United States was disposed of in unlined landfills and only 2% in secure landfills. (Williams.) Accordingly, the practice ARCO used until 1980 was consistent with industry practice. (Williams.)

396. ARCO also made environmental improvements at the Site that cut emissions, reduced solid and liquid waste volumes, and increased environmental monitoring. (Williams.)

397. Likewise, CFAC's operation of the facility generally conformed to regulatory requirements and industry practice. For example, CFAC stopped using unlined landfills and, beginning in 1990, took its SPL off-Site for disposal. CFAC's treatment of SPL therefore reflected the evolving rules and norms regarding its disposal.

398. Any shifting of liability based on the parties' relative care would therefore be tied to discrete, unpermitted releases that did not conform to regulatory requirements or the prevailing practices. As shown at trial, both parties

engaged in such releases, including leachate onto the WSSP (ARCO and CFAC), pot diggings onto the WSSP (CFAC), and cyanide seep into the Flathead River (CFAC). Even Batson recognizes, however, that these discrete instances of noncompliance are not sufficient to offset either party's allocation obligation.

399. But ARCO argues that CFAC failed to exercise due care in two other ways: failing to address threats to groundwater earlier and consciously avoiding regulatory obligations.

400. Regarding groundwater, Williams testified that cyanide concentration from the West Landfill area was known to CFAC at the time it acquired the facility in 1985 and that if CFAC had taken action to monitor and address that threat sooner, the current contamination may not have been as bad. While the evidence supports a finding that CFAC was aware of contamination issues at the time of acquisition, (*see* Ex. 1085 at 44–47), the record also shows that CFAC did monitor groundwater starting in the late 1980s and installed new wells to do so, (*see* Exs. 840, 841, 99, 61). CFAC also increased the frequency of groundwater sampling. (Ex. 247.) That monitoring then in fact led to remedial action. Wells installed in the 1990s downgradient from the West Landfill and WSSP indicated the presence of a cyanide plume, (Ex. 84, 270), which led to the installation of additional wells, (Ex. 268, 271), and ultimately, the installation of a synthetic cap on the West Landfill in 1994, (Ex. 65).

401. ARCO's regulatory argument presents a closer question. In December 1989, CFAC retained the environmental consulting firm, Kennedy/Jenks/Chilton, Inc., to perform an environmental site assessment to "evaluate operations at the plant to identify potential environmental issues associated with past and present chemical and waste management practices." (Ex. 1214; Williams.) Based on the information provided in that report, CFAC understood in 1989 that applying for a RCRA hazardous waste storage permit "would give the regulatory agencies the opportunity for further scrutiny of the facility" and could lead to public exposure and a review of all past and current plant waste disposal practices by regulatory agencies. (Ex. 1214 at 5; Williams.) CFAC did not apply for such a permit and the evidence suggests that CFAC knowingly avoided regulatory requirements and regulatory scrutiny because the alternative would have meant beginning site-wide environmental investigations and implementing RCRA corrective action measures to remediate some or all the environmental problems that the investigations identified. (Ex. 1214 at 21; Williams.) And, if this had been done in the proper time frame, it likely would have reduced both the scope and cost of the present CERCLA action. (Williams.) This fact therefore weighs in favor of allocating more responsibility to CFAC.

iii. Cooperation

402. Another equitable factor relevant here is the degree of past and present cooperation by each party with the government to prevent harm to health and the environment. *Pinal Creek Grp. v. Newmont Mining Corp.*, 118 F.3d 1298, 1304 (9th Cir. 1997), *overruled on other grounds by Atl. Research Corp.*, 551 U.S. at 138–39. CFAC emphasizes the parties’ cooperation with EPA related to the present cleanup action. ARCO, on the other hand, insists that cooperation in this context is not so temporally limited but can include a party’s conduct during the operation of a facility.

403. CFAC is credited for its decision to voluntarily enter an Administrative Order on Consent with EPA and its consistent cooperation and coordination with EPA throughout the remediation process. ARCO was invited to participate in this process and, other than submitting comments to the draft Feasibility Study that were rejected, chose not to.

404. Despite ARCO’s attempt to broaden the temporal scope of this factor, there is also very little evidence that ARCO went out of its way during its operation to cooperate with authorities. To the contrary, ARCO implemented certain environmentally friendly protections—such as its dry scrubber system—only after the facility emitted so much fluoride that it killed the surrounding vegetation. (Williams; *see* Ex. 18 (chronology of facility upgrades).) Furthermore,

while ARCO attempted to prove a history of cooperation with EPA at other CERCLA sites in Montana, a devastating cross-examination showed that claim to be untenable. (Johnson.) ARCO has fought tooth-and-nail to avoid paying the \$1,027,721,000 it has paid to cleanup former industrial sites in Montana.

405. As a result, the sixth Gore factor weighs in favor of allocating more responsibility to ARCO. *See also Asarco LLC*, 975 F.3d at 871 (recognizing “general equitable principle that the cooperating, settling party should receive the benefit of the doubt”).

iv. Conclusion

406. Assessed under the Gore factors alone, the parties’ relative contributions to the Site warrant an equal assignment of liability. But there are qualitative considerations related to this Site that require assessing additional equitable factors that tip the scales in ARCO’s favor.

2. Additional Equitable Considerations

407. The additional factor of contractual indemnity and Site value and economic benefit warrant assigning greater liability to CFAC. Because the contractual indemnity issue is the most important factor in this case, such an allocation is ultimately appropriate.

i. The Acquisition Agreement

408. A contract between parties concerning environmental liability is a recognized CERCLA equitable allocation factor. *Cadillac Fairview/Cal.*, 299 F.3d

at 1027-28; *accord Beazer East, Inc. v. Mead Corp.*, 412 F.3d 429, 447–49 (3d Cir. 2005); *Kerr–McGee Chem. Corp. v. Lefton Iron & Metal Co.*, 14 F.3d 321, 326 (7th Cir. 1994).

409. The parties’ agreement on how they intended to allocate environmental liability among themselves can be considered in CERCLA equitable allocation even if their agreement does not shift the liability as a matter of contract law. *Cadillac Fairview/Cal.*, 299 F.3d at 1027–28 (concluding indemnity agreement was dispositive CERCLA equitable allocation factor regardless of whether “the contract would have embraced the damages” at issue); *Beazer East*, 412 F.3d at 447 (“As a matter of *equity* . . . the intent of the parties, which is manifested by their actions and in the written agreement, can be taken into account—no matter what our *legal* conclusion was”); *Kerr–McGee Chem. Corp.*, 14 F.3d at 326 (“Although contractual arrangements between parties are not necessarily determinative of statutory liability, Lefton’s intent to indemnify Kerr-McGee should be considered in the allocation of cleanup costs.”). Given the history outlined above, the 1985 Agreement is an important consideration for allocating responsibility in this case.

410. The parties’ Acquisition Agreement contains a provision prohibiting CFAC from suing ARCO after August 31, 1990 for matters “with respect to” ARCO’s time-limited indemnity of CFAC. The evidence shows that even though

the language of the Agreement is not specific enough to waive CFAC's statutory rights, the parties understood these obligations to include environmental liabilities, including the very environmental liabilities that are the subject of this case. Even if not enforceable as a matter of contract law to bar CFAC's claims, the parties' intent, as reflected in the circumstances of the sale and their subsequent conduct, was that ARCO would have no further liability to CFAC five years after the sale.

411. Similarly, the Acquisition Agreement contains cross-indemnity provisions. ARCO's indemnity expired five years after the sale, on August 31, 1990, while CFAC's indemnity obligation is perpetual. The parties intended their indemnity obligations to encompass environmental liabilities, including the environmental liabilities at issue here. Even if the indemnity provisions are not enforceable as a matter of contract law to bar CFAC's claims, the evidence shows that the parties intended for CFAC alone to have an indemnification obligation to ARCO after August 31, 1990. The parties' intent behind their indemnity obligations is significant for allocating responsibility here.

412. Although not complete defenses as a matter of contract law, the evidence also shows that the parties intended for CFAC to indemnify ARCO for any costs or liabilities related to CFAC's operation of the smelter. While not enforced as a matter of contract law, the parties' agreement on how to assign liability for these costs is considered in the equitable allocation context.

413. Based on proof of the intent of the parties, it is appropriate to allocate more responsibility to CFAC than ARCO. *See Cadillac Fairview/Cal.*, 299 F.3d at 1027–28; *Beazer East*, 412 F.3d at 447.

ii. Economic Benefit and Site Value

414. An additional equitable factor relevant to allocation in this case is the relative financial benefits received by the parties.

415. There are two aspects to this analysis. The first aspect is the relative benefits received by the parties from their ownership and operation of the facility. *See Lockheed Martin Corp. v. United States*, 35 F. Supp. 3d 92, 132, 156–57 (D.D.C. 2014). The second aspect is whether a party will gain a financial benefit from remediation of the site. *W. Props. Serv. Corp.*, 358 F.3d at 691; *Trinity Indus., Inc. v. Greenlease Holding Co.*, 903 F.3d 333, 362 (3d Cir. 2018) (“[T]he increased value of a remediated site [is] an appropriate equitable factor to consider when allocating cleanup costs.”).

416. As to the first aspect, both parties profited greatly from their ownership and operation of the Site. The parties present different calculations, however, for what that their respective economic benefit was.

417. ARCO presented testimony from an accounting and financial consultant David Hall, who opined that ARCO expended \$1.1 billion on the facility and gained (revenue less production cost, including depreciation) \$565

million. CFAC, on the other hand, expended \$95 million and gained \$1.054 billion. Hall explained that ARCO made significant capital investments during its operation of the facility that ultimately benefited CFAC. For example, after constructing the facility at an initial cost of \$65 million, ARCO added three additional potlines which cost over \$62 million. ARCO also financed over \$75 million worth of environmental improvement projects, including installation of Sumitomo technology and replacing the wet scrubbers with dry scrubbers. Hall also credited ARCO \$118 million as “undepreciated capital investment [property, plant and equipment] acquired in 1985 transaction.” (Ex. 1278 at 52; *see also* Ex. 34.) Based on these considerations, he concluded that ARCO received 35% of the facility’s financial benefit while CFAC received 65%.

418. In rebuttal, CFAC presented the expert testimony of Jeffrey Dunn. Dunn is critical of Hall’s use of book value to assess the asset transfer in 1985. According to Dunn, the market value of the asset is the more important metric, and it is distinct from what someone paid for it. Dunn pointed out, for example, that ARCO’s internal documents showed that it was going to lose money operating the plant for the next few years and therefore needed to liquidate or sell to avoid those losses. (*See* Exs. 112, 236.) And ARCO itself valued the facility at only \$5 million at the time. (Ex. 112 at 5.) According to Dunn, CFAC was only able to make a profit because it fundamentally changed the business model of the plant

(going from owning the aluminum and selling it after processing to simply processing aluminum for third party owners). Dunn therefore concluded that CFAC did not receive any net financial benefit at the time of the acquisition.

419. Given the business prospects for the facility at the time of sale and ARCO's own documentation about the necessity of liquidation, it is not appropriate to apply a \$118 million capital investment offset. Even if the property, plant, and equipment was worth more than book value as argued by Hall, (*see* Ex. 34 at 13), the details surrounding the sale showed the facility lacked value as a going concern. But even removing that from the calculation, the change to relative percentage of net financial benefit is minor: 38% ARCO compared to 62% CFAC.

420. But the parties disagree whether the Court should consider the \$659 million CFAC made from the sale of electricity—not the production of aluminum—in 2001/2002 as part of its economic benefit. Plant records confirm that CFAC stopped virtually all aluminum production and waste generation during this period. (Ex. 283 at 99, 105.) Ultimately, the \$659 million is a benefit divorced from the production of aluminum, which is the source of the cleanup obligation. As a result, it is not appropriate to consider the profits from the sale of electricity in assessing the economic benefit CFAC realized during its operation of the Site. Removing the electricity sales from CFAC's profit margin results in a total profit of approximately \$279 million, or a relative financial benefit of 33%.

421. As to the second aspect, the parties agree that the Site has no commercial value in its current, un-remediated state. The parties also agree that, once cleaned up, the Site is expected to have some commercial value. They disagree, however, on that value. Each party offered appraisal testimony on the present market value of the Site, assuming it is sold after the remediation is complete.

422. ARCO's real estate expert Thomas Stevens opined that after remediation is completed, the value of the entire property that CFAC purchased from ARCO will be \$15,500,000 (a gross total value of \$22 million but with a single purchaser discount of approximately \$7 million). Stevens valued the industrial portion of the Site (approximately 807 acres and inclusive of the plant) after remediation at \$3,750,000. In rebuttal, CFAC's real estate expert Kraig Kosena appraised just the main plant site (approximately 1000 acres) for \$1.3 million. Both experts agree, however, that it was difficult to find comparable sales.

423. Based on the proof presented at trial, the Site area (the industrial portion approximately 807 acres) is valued at \$2.25 million. ARCO failed to present any evidence that CFAC's additional property was part of the original acquisition sale or should be considered in this valuation. Nevertheless, Hall persuasively testified that because CFAC purchased the property for \$1, the return

on investment based only on the value of the property is significant for CFAC above and beyond any economic value realized by the operation of the Site.

424. As a result, even with the diminished profit and a lower Site value than that proposed by ARCO, CFAC realized sufficient economic benefit from the Site so as to make this a neutral factor.

D. Conclusion

425. Even though CFAC reaped a lower percentage of the economic benefit from the Site than that argued by ARCO, the most important allocation factor remains the parties' 1985 Acquisition Agreement.

426. Recognizing that mathematical precision is not realistic in the CERCLA equitable allocation process, the proof presented at trial supports the following fair and equitable allocation of recoverable CERCLA response costs for the Site:

CFAC: 65%

ARCO: 35%.

This allocation applies to CFAC's past costs that the Court has concluded are necessary CERCLA response costs incurred consistently with the National Contingency Plan, as well as to any future costs that CFAC establishes are necessary CERCLA response costs incurred consistent with the National Contingency Plan.

427. Further, as discussed above, the Court finds the Site value to be \$2.25 million. ARCO shall therefore receive a credit for \$787,500.00 (35% of that sale value) towards its outstanding CERCLA obligation. The parties shall confer to determine how that credit shall be applied.

VII. CECRA

428. On July 31, 2014, Jenny Chambers, then Remediation Division administrator for the MDEQ, sent an email to CFAC, attaching a letter and draft Administrative Order on Consent. (Agreed ¶ 62; Doc. 91 ¶ 53; *See Ex. 1007.*) ARCO never received a notice from MDEQ. (Johnson.)

429. CFAC was “[u]nable to agree on an Administrative Order on Consent” with MDEQ and “[n]egotiations with [MDEQ] ended in December 2014.” (Agreed ¶ 63; Doc. 91 ¶ 54; Doc. 1 at ¶¶ 66-67.)

430. CFAC did not submit to MDEQ an application for the approval of a voluntary cleanup plan for the Site referencing MCA §§ 75-10-730 through 75-10-738. (Agreed ¶ 64; Doc. 91 ¶ 56; Ex. 1251.)

431. No court has found CFAC liable under the CECRA. (Agreed ¶ 65; Doc. 91 at ¶ 57; Ex. 1251.) CFAC has not initiated any voluntary cleanup at the Site pursuant to the Montana Voluntary Cleanup and Redevelopment Act. (Stroiazza.) CFAC has not received a formal notice of CECRA potential liability pursuant to Mont. Code Ann. § 75-10-711(3). (Stroiazza.)

432. Because the investigation and cleanup of the Site are being overseen by EPA pursuant to CERCLA, MDEQ has not undertaken remedial action at the Site or issued any administrative orders to CFAC to investigate or perform remedial action at the Site pursuant to CECRA. (Stroiazso.) And, as conceded by Stroiazso, CFAC has not incurred any costs under CECRA at the Site.

433. As a result, CFAC cannot maintain its claim under CECRA. Accordingly, ARCO's Rule 52 motion is GRANTED as to CFAC's CECRA claims.

VIII. CONCLUSION

As repeatedly stated during trial, counsel's professional conduct and advocacy was greatly appreciated, especially given the complex nature of this case.

Based on the analysis provided above, IT IS ORDERED that:

(1) ARCO's oral Rule 52 motion is GRANTED. The Court finds in favor of ARCO as to CFAC's asbestos and CECRA claims.

(2) To the extent not addressed in (1), ARCO's breach of contract counterclaim fails as outlined above.

(3) The parties have each prevailed on portions of their CERCLA claims as outlined above. Accordingly,

(a) ARCO shall reimburse 35% of CFAC's past costs for the cleanup of the Site billed prior to March 31, 2021 as calculated above.

Applying the parties' relative percentage shares to the total of past costs to be allocated, \$12,365,603.17, results in \$8,037,642.06 as CFAC's equitably allocated share and \$4,327,961.11 as ARCO's equitably allocated share.

(b) A declaratory judgment is entered in favor of CFAC and against ARCO with respect to the future costs for the cleanup of the Site, meaning costs incurred after March 31, 2021, and including construction and operations-and-maintenance costs pursuant to the final remedy adopted by EPA; these future costs are allocated among the parties as follows: 35% ARCO and 65% CFAC.

(c) ARCO is entitled to a credit against CFAC's future costs amounting to 35% percent of the Site's appraised post-remediation value of \$2,250,000 (or \$787,500). (*See* Doc. 124 at 14–15.) ARCO is not entitled to any portion of the proceeds from any future sale by CFAC of real property.

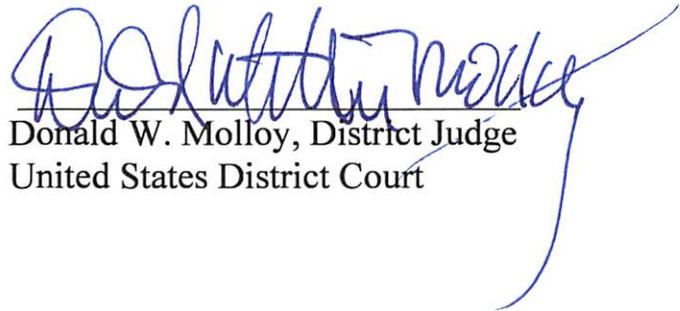
(4) Each party shall bear their own fees and costs.

(5) The Court declines to retain jurisdiction over any disputes relating to future costs.

(6) Prejudgment interest is awarded to CFAC at the rate set forth in 42 U.S.C. § 9607(a)(4). CFAC shall meet and confer with ARCO to establish the appropriate calculation for prejudgment interest in this case. No later than thirty

days after entry of this Order, CFAC shall file its proposed interest calculation and provide supporting documentation for a finding as to the date upon which such interest should accrue. *See AmeriPride Servs. Inc.*, 782 F.3d at 491. Any objection to that calculation by ARCO shall be filed no later than seven (7) days later. Judgment will be entered after prejudgment interest has been determined.

DATED this 25th day of August, 2021.



Donald W. Molloy, District Judge
United States District Court