



COLORADO

Division of Reclamation,
Mining and Safety

Department of Natural Resources

September 3, 2019

Kristin Barrett
Save South Park
P.O. Box 2168
Fairplay, CO 80440-2168

RE: Analysis of Fish Mercury Data Report; Request for Additional Information

Dear Ms. Barrett,

The Division of Reclamation, Mining and Safety (Division/DRMS) appreciates the opportunity to address your email of August 19, 2019 noting concerns with the Analysis of Fish Mercury Data Report (Report), issued by the Colorado Department of Public Health and Environment on January 4, 2019. The Report was the culmination of a multi-year effort between the DRMS, Colorado Parks and Wildlife (CPW), and the Colorado Department of Public Health and Environment (CDPHE) to investigate the potential for mercury mobilization from permitted mine sites which operate in historic placer mining areas in the vicinity of Fairplay, Colorado. Save South Park (SSP) has expressed several concerns with the issued CDPHE Report, which are listed below in bold and italic font along with the Division's responses.

1. ***The report states in Page 1, Paragraph 1 that: "Save South Park submitted a formal complaint to the Division of Reclamation Mining and Safety alleging that gold, sand and gravel mines near the towns of Alma and Fairplay were discharging mercury into the Middle Fork of the South Platte River."***

SSP first contacted the Division in February 2018 to express concerns regarding the potential for mercury mobilization from historic placer operations in the vicinity of Fairplay, Colorado. At the time, SSP was advised the formal submittal of such concerns would be treated as a citizen complaint. On February 13, 2018, Save South Park submitted to the Division a formal complaint which alleged mercury was being mobilized from mining operations in Park County. The Division records review indicate mercury is not approved at any of the mining operations in this area or elsewhere in the State of Colorado. However, due to the concerns raised by Save South Park, the Division initiated an investigation.

SSP's formal complaint contained references to permitted mining operations and provided specific details from the approved Reclamation Permits. On March 1, 2018, DRMS informed Trevor Messa that SSP's citizen complaint could be withdrawn by submitting a written request. Mr. Messa was informed the Division's investigation into potential mercury mobilization would be terminated if the citizen complaint was withdrawn. Mr. Messa did not submit a request to withdraw the citizen complaint and expressed a continued interest in having the Division conduct an investigation. As a regulatory authority, the Division has discretion when determining whether



to treat public concerns as formal citizen complaints. The nature of the concerns raised were determined to be best tracked through the Division's formal complaint process. The Division respectfully declines the request to reissue the report with SSP's suggested changes.

2. ***Since DRMS considered SSP's mercury report to be a complaint (even though it wasn't), the DRMS did not follow its own procedures. See excerpt from "Policies of the Mined Land Reclamation Board.:***

The Mined Land Reclamation Board has directed staff to respond to citizen complaints within 30 days of receipt of the complaint. Upon receiving the citizen complaint submitted by SSP, the Division determined through policy guidelines that normal monitoring inspections and visual observations would not be sufficient to determine if mercury was being mobilized from multiple mining operations in the vicinity of Fairplay, Colorado. Therefore, the Division facilitated an investigation into the matter which required coordinating and utilizing resources from multiple government agencies. This path is consistent with MLRB and Division policies and procedures. The CDPHE, CPW and Division provided staff resources for the investigation, which was concluded on January 4, 2019 with the issuance of the Report.

3. ***Page 1 Paragraph one, last sentence states "...it is possible that the mine operators were encountering and mobilizing mercury used in the historic mining area."***

Environmental Protection Plans (EPP) are specific to hard rock and metal mining operations. The mines in Park County are permitted as construction materials operations and are not required to provide EPPs. Additionally, the Division has not approved the use of mercury at any of these operations, nor have any of the Operators reported encountering mercury in the course of conducting operations. Should the Division receive evidence of mercury mobilization at any permitted mine site, necessary permitting revisions would be required to ensure that toxic materials are not released into the environment.

4. ***Page 2, Paragraph 2 notes that crayfish were not sampled due to lack of comparative statewide data.***

As noted in the Report, crayfish tissue was not analyzed for mercury content due to a lack of historical data for comparison. The lack of comparative data did not warrant analysis of crayfish tissue under the funding structure for the investigation. Therefore, fish tissue sampling was determined by CDPHE and the lab to be the most viable and accurate sampling method.

5. ***There is no quality control (QC) or quality assurance (QA) plan included with this report.***

The fish tissue samples were analyzed at the CDPHE Laboratory Services Division. The CDPHE lab has a robust QA / QC protocol, which has been enclosed with this letter.

6. *Provide a copy of the raw data for public review.*

The raw data has been enclosed with this letter. Any questions regarding the raw data should be directed to the CDPHE.

7. *Page 5, Paragraph two, the report states that...mercury levels in brown trout at the Fairplay site are lower than the levels measured in that species and all waterbodies statewide."*

The statement made regarding the levels of mercury in brown trout at the Fairplay site compared to the levels measured in that species at all river sites and all waterbodies statewide is accurate per multiple agency review.

In conclusion, while the Division acknowledges your concerns, after consultations with CDPHE and CPW, we stand by the content of the report and respectfully decline the request to reissue the report with SSP's suggested changes.

If you have any questions, please contact me at (303)866-3567 ext. 8150.

Sincerely,



Russ Means
Minerals Program Director
Division of Reclamation, Mining and Safety

Cc: Dan Gibbs, Executive Director of Department of Natural Resources
Cc: Mined Land Reclamation Board Members
Cc: Ginny Brannon, Division Director, Reclamation, Mining and Safety
Cc: Michael Cunningham, DRMS, Senior Environmental Protection Specialist, Denver
Cc: Sarah Erickson, CDPHE, WQCD, Physical Science Researcher
Cc: Mark Lamb, CPW, Area Wildlife Manager

Attachment: CDPHE raw fish tissue data

CompositeID	Length	LabID	DateCollected	Species	Location	Composite	DateSubmitted	DateReported	Parameter	Fraction	Method	Value	Units	Qualifier	DL	RL
06042018FPHLOC01	228	1808150273	6/4/2018 0:00 LOC	Fairplay Be	06042018F		8/15/2018 11:15	8/21/2018 14:18	Mercury	Total	EPA 7473	0.014 mg/kg	J		0.014	0.045
06042018FPHLOC05	261	1808150277	6/4/2018 0:00 LOC	Fairplay Be	06042018F		8/15/2018 11:15	8/21/2018 14:18	Mercury	Total	EPA 7473	0.015 mg/kg	J		0.014	0.045
06042018FPHLOC02	245	1808150274	6/4/2018 0:00 LOC	Fairplay Be	06042018F		8/15/2018 11:15	8/21/2018 14:18	Mercury	Total	EPA 7473	0.019 mg/kg	J		0.014	0.045
06042018FPHLOC03	252	1808150275	6/4/2018 0:00 LOC	Fairplay Be	06042018F		8/15/2018 11:15	8/21/2018 14:18	Mercury	Total	EPA 7473	0.021 mg/kg	J		0.014	0.045
06042018FPHLOC04	291	1808150276	6/4/2018 0:00 LOC	Fairplay Be	06042018F		8/15/2018 11:15	8/21/2018 14:18	Mercury	Total	EPA 7473	0.029 mg/kg	J		0.014	0.045
06042018FPHLOC06	269	1808150278	6/4/2018 0:00 LOC	Fairplay Uj	06042018F		8/15/2018 11:15	8/21/2018 14:18	Mercury	Total	EPA 7473	0.066 mg/kg	J		0.014	0.045
06042018FPHLOC07	305	1808150279	6/4/2018 0:00 LOC	Fairplay Uj	06042018F		8/15/2018 11:15	8/21/2018 14:18	Mercury	Total	EPA 7473	0.051 mg/kg	J		0.014	0.045
06042018FPHLOC08	312	1808150280	6/4/2018 0:00 LOC	Fairplay Uj	06042018F		8/15/2018 11:15	8/21/2018 14:18	Mercury	Total	EPA 7473	0.084 mg/kg	J		0.014	0.045
06042018FPHLOC09	320	1808150281	6/4/2018 0:00 LOC	Fairplay Uj	06042018F		8/15/2018 11:15	8/21/2018 14:18	Mercury	Total	EPA 7473	0.084 mg/kg	J		0.014	0.045
06042018FPHLOC10	85	1808150282	6/4/2018 0:00 LOC	Fairplay Uj	06042018F		8/15/2018 11:15	8/21/2018 14:18	Mercury	Total	EPA 7473	0.082 mg/kg	J		0.014	0.045
06042018FPHLOC11	40	1808150283	6/4/2018 0:00 LOC	Fairplay Uj	06042018F		8/15/2018 11:15	8/21/2018 14:18	Mercury	Total	EPA 7473	0.014 mg/kg	J	BDL	0.014	0.045
06042018FPHLOC12	87	1808150284	6/4/2018 0:00 LOC	Fairplay Uj	06042018F		8/15/2018 11:15	8/21/2018 14:18	Mercury	Total	EPA 7473	0.028 mg/kg	J		0.014	0.045
06042018FPHLOC13	100	1808150285	6/4/2018 0:00 LOC	Fairplay Uj	06042018F		8/15/2018 11:15	8/21/2018 14:18	Mercury	Total	EPA 7473	0.017 mg/kg	J		0.014	0.045
06042018FPHLOC14	80	1808150286	6/4/2018 0:00 LOC	Fairplay Uj	06042018F		8/15/2018 11:15	8/21/2018 14:18	Mercury	Total	EPA 7473	0.023 mg/kg	J		0.014	0.045
06042018FPHLOC15	81	1808150287	6/4/2018 0:00 LOC	Fairplay Uj	06042018F		8/15/2018 11:15	8/21/2018 14:18	Mercury	Total	EPA 7473	0.021 mg/kg	J		0.014	0.045
06042018FPHLOC16	75	1808150288	6/4/2018 0:00 LOC	Fairplay Uj	06042018F		8/15/2018 11:15	8/21/2018 14:18	Mercury	Total	EPA 7473	0.027 mg/kg	J		0.014	0.045
06042018FPHLOC17	74	1808150289	6/4/2018 0:00 LOC	Fairplay Uj	06042018F		8/15/2018 11:15	8/21/2018 14:18	Mercury	Total	EPA 7473	0.026 mg/kg	J		0.014	0.045
06042018FPHLOC18	85	1808150290	6/4/2018 0:00 LOC	Fairplay Uj	06042018F		8/15/2018 11:15	8/21/2018 14:18	Mercury	Total	EPA 7473	0.019 mg/kg	J		0.014	0.045
06042018FPHLOC19	88	1808150291	6/4/2018 0:00 LOC	Fairplay Uj	06042018F		8/15/2018 11:15	8/21/2018 14:18	Mercury	Total	EPA 7473	0.019 mg/kg	J		0.014	0.045
06042018FPHLOC20	359	1808150292	6/4/2018 0:00 LOC	Fairplay Uj	06042018F		8/15/2018 11:15	8/21/2018 14:18	Mercury	Total	EPA 7473	0.019 mg/kg	J		0.014	0.045
061218MNTYBK01	71	1808150293	6/12/2018 0:00 BRK	Montgome	061218M		8/15/2018 14:15	10/4/2018 14:02	Mercury	Total	EPA 7473	0.053 mg/kg	J		0.014	0.045
061218MNTYBK02	70	1808150294	6/12/2018 0:00 BRK	Montgome	061218M		8/15/2018 14:15	10/4/2018 14:02	Mercury	Total	EPA 7473	0.032 mg/kg	J		0.014	0.045
061218MNTYBK03	67	1808150295	6/12/2018 0:00 BRK	Montgome	061218M		8/15/2018 14:15	10/4/2018 14:02	Mercury	Total	EPA 7473	0.034 mg/kg	J		0.014	0.045
061218MNTYBK04	69	1808150296	6/12/2018 0:00 BRK	Montgome	061218M		8/15/2018 14:15	10/4/2018 14:02	Mercury	Total	EPA 7473	0.031 mg/kg	J		0.014	0.045
061218MNTYBK05	63	1808150297	6/12/2018 0:00 BRK	Montgome	061218M		8/15/2018 14:15	10/4/2018 14:02	Mercury	Total	EPA 7473	0.027 mg/kg	J		0.014	0.045
061218MNTYBK06	57	1808150298	6/12/2018 0:00 BRK	Montgome	061218M		8/15/2018 14:15	10/4/2018 14:02	Mercury	Total	EPA 7473	0.031 mg/kg	J		0.014	0.045
061218MNTYBK07	67	1808150299	6/12/2018 0:00 BRK	Montgome	061218M		8/15/2018 14:15	10/4/2018 14:02	Mercury	Total	EPA 7473	0.039 mg/kg	J		0.014	0.045
061218MNTYBK08	118	1808150300	6/12/2018 0:00 BRK	Montgome	061218M		8/15/2018 14:15	10/4/2018 14:02	Mercury	Total	EPA 7473	0.082 mg/kg	J		0.014	0.045
061218MNTYBK09	119	1808150302	6/12/2018 0:00 BRK	Montgome	061218M		8/15/2018 14:15	10/4/2018 14:02	Mercury	Total	EPA 7473	0.064 mg/kg	J		0.014	0.045
061218MNTYBK10	107	1808150303	6/12/2018 0:00 BRK	Montgome	061218M		8/15/2018 14:15	10/4/2018 14:02	Mercury	Total	EPA 7473	0.065 mg/kg	J		0.014	0.045
061218MNTYBK11	83	1808150304	6/12/2018 0:00 BRK	Montgome	061218M		8/15/2018 14:15	10/4/2018 14:02	Mercury	Total	EPA 7473	0.069 mg/kg	J		0.014	0.045
061218MNTYBK12	64	1808150305	6/12/2018 0:00 BRK	Montgome	061218M		8/15/2018 14:15	10/4/2018 14:02	Mercury	Total	EPA 7473	0.043 mg/kg	J		0.014	0.045
061218MNTYBK13	244	1808150309	6/12/2018 0:00 BRK	Montgome	061218M		8/15/2018 14:15	10/4/2018 14:02	Mercury	Total	EPA 7473	0.045 mg/kg	J		0.014	0.045
061218MNTYBK14	233	1808150311	6/12/2018 0:00 BRK	Montgome	061218M		8/15/2018 14:15	10/4/2018 14:02	Mercury	Total	EPA 7473	0.187 mg/kg	J		0.014	0.045
061218MNTYBK15	214	1808150312	6/12/2018 0:00 BRK	Montgome	061218M		8/15/2018 14:15	10/4/2018 14:02	Mercury	Total	EPA 7473	0.126 mg/kg	J		0.014	0.045
061218MNTYBK16	192	1808150313	6/12/2018 0:00 BRK	Montgome	061218M		8/15/2018 14:15	10/4/2018 14:02	Mercury	Total	EPA 7473	0.063 mg/kg	J		0.014	0.045
061218MNTYBK17	215	1808150315	6/12/2018 0:00 BRK	Montgome	061218M		8/15/2018 14:15	10/4/2018 14:02	Mercury	Total	EPA 7473	0.14 mg/kg	J		0.014	0.045
061218MNTYBK18	198	1808150316	6/12/2018 0:00 BRK	Montgome	061218M		8/15/2018 14:15	10/4/2018 14:02	Mercury	Total	EPA 7473	0.115 mg/kg	J		0.014	0.045
061218MNTYLOC01	85	1808150301	6/12/2018 0:00 LOC	Montgome	061218M		8/15/2018 14:15	10/4/2018 14:02	Mercury	Total	EPA 7473	0.03 mg/kg	J		0.014	0.045
061218MNTYLOC02	238	1808150306	6/12/2018 0:00 LOC	Montgome	061218M		8/15/2018 14:15	10/4/2018 14:02	Mercury	Total	EPA 7473	0.067 mg/kg	J		0.014	0.045
061218MNTYLOC03	206	1808150307	6/12/2018 0:00 LOC	Montgome	061218M		8/15/2018 14:15	10/4/2018 14:02	Mercury	Total	EPA 7473	0.055 mg/kg	J		0.014	0.045
061218MNTYLOC04	214	1808150308	6/12/2018 0:00 LOC	Montgome	061218M		8/15/2018 14:15	10/4/2018 14:02	Mercury	Total	EPA 7473	0.049 mg/kg	J		0.014	0.045
061218MNTYLOC05	254	1808150310	6/12/2018 0:00 LOC	Montgome	061218M		8/15/2018 14:15	10/4/2018 14:02	Mercury	Total	EPA 7473	0.079 mg/kg	J		0.014	0.045
061218MNTYLOC06	264	1808150314	6/12/2018 0:00 LOC	Montgome	061218M		8/15/2018 14:15	10/4/2018 14:02	Mercury	Total	EPA 7473	0.085 mg/kg	J		0.014	0.045
06292018SPHLOC01	488	1809280168	6/29/2018 0:00 LOC	Spinney M	06292018S		9/28/2018 15:23	10/4/2018 14:02	Mercury	Total	EPA 7473	0.058 mg/kg	J		0.014	0.045
06292018SPHLOC02	480	1809280169	6/29/2018 0:00 LOC	Spinney M	06292018S		9/28/2018 15:23	10/4/2018 14:02	Mercury	Total	EPA 7473	0.207 mg/kg	J		0.014	0.045
06292018SPHLOC03	454	1809280170	6/29/2018 0:00 LOC	Spinney M	06292018S		9/28/2018 15:23	10/4/2018 14:02	Mercury	Total	EPA 7473	0.057 mg/kg	J		0.014	0.045
06292018SPHNP0K01	725	1809280163	6/29/2018 0:00 NPK	Spinney M	06292018S		9/28/2018 15:18	10/4/2018 14:02	Mercury	Total	EPA 7473	0.193 mg/kg	J		0.014	0.045
06292018SPHNP0K02	920	1809280164	6/29/2018 0:00 NPK	Spinney M	06292018S		9/28/2018 15:18	10/4/2018 14:02	Mercury	Total	EPA 7473	0.255 mg/kg	J		0.014	0.045
06292018SPHNP0K03	1125	1809280165	6/29/2018 0:00 NPK	Spinney M	06292018S		9/28/2018 15:18	10/4/2018 14:02	Mercury	Total	EPA 7473	0.259 mg/kg	J		0.014	0.045
06292018SPHNP0K04	845	1809280166	6/29/2018 0:00 NPK	Spinney M	06292018S		9/28/2018 15:18	10/17/2018 14:23	Mercury	Total	EPA 7473	0.257 mg/kg	J		0.014	0.045
06292018SPHNP0K05	516	1809280167	6/29/2018 0:00 NPK	Spinney M	06292018S		9/28/2018 15:18	10/17/2018 14:23	Mercury	Total	EPA 7473	0.161 mg/kg	J		0.014	0.045
06292018SPHNP0K06	523	1809280171	6/29/2018 0:00 RBT	Spinney M	06292018S		9/28/2018 15:26	10/17/2018 14:23	Mercury	Total	EPA 7473	0.096 mg/kg	J		0.014	0.045
06292018SPHNP0K07	555	1809280172	6/29/2018 0:00 RBT	Spinney M	06292018S		9/28/2018 15:26	10/17/2018 14:23	Mercury	Total	EPA 7473	0.036 mg/kg	J		0.014	0.045
06292018SPHNP0K08	433	1809280173	6/29/2018 0:00 RBT	Spinney M	06292018S		9/28/2018 15:26	10/17/2018 14:23	Mercury	Total	EPA 7473	0.081 mg/kg	J		0.014	0.045
06292018SPHNP0K09	505	1809280174	6/29/2018 0:00 RBT	Spinney M	06292018S		9/28/2018 15:26	10/17/2018 14:23	Mercury	Total	EPA 7473	0.18 mg/kg	J		0.014	0.045
06292018SPHNP0K10	390	1809280175	6/29/2018 0:00 RBT	Spinney M	06292018S		9/28/2018 15:26	10/17/2018 14:23	Mercury	Total	EPA 7473	0.036 mg/kg	J		0.014	0.045