To: Carey, Douglas@Waterboards[douglas.carey@waterboards.ca.gov]
Cc: gr@burlesonconsulting.com[gr@burlesonconsulting.com]; Ferguson, Scott@Waterboards[scott.ferguson@waterboards.ca.gov]; Stetler, Chris@Waterboards[Chris.Stetler@waterboards.ca.gov]; Zentner, Taylor@Waterboards[taylor.zentner@waterboards.ca.gov]; Brown, Anthony R (RM[anthony.brown@bp.com]; Black, Ned[Black.Ned@epa.gov]; Cale Pete[Cale.Pete@washoetribe.us]; Cory Koger[Cory.S.Koger@usace.army.mil]; Dana Barton[Barton.Dana@epa.gov]; Darrel Cruz 2[Darrel.Cruz@washoetribe.us]; David Friedman[dfriedman@ndep.nv.gov]; Fred K[fredk@aeseinc.com]; Gary Riley[Riley.Gary@epa.gov]; Joshua Wirtschafter (Wirtschafter.Joshua@epa.gov)[Wirtschafter.Joshua@epa.gov]; Ken Maas[kmaas@fs.fed.us]; Lombardi, Marc (marc.lombardi@amecfw.com)[marc.lombardi@amecfw.com]; Norman Harry[Norman.Harry@washoetribe.us]; Patty Cubanski[pc@burlesonconsulting.com]; Serda, Sophia[Serda.Sophia@epa.gov]; Steve Hampton[Steve.Hampton@wildlife.ca.gov]; Thomas Maurer[thomas_maurer@fws.gov]; Toby McBride[toby_mcbride@fws.gov]
From: Deschambault, Lynda
Sent: Tue 6/13/2017 3:22:31 AM
Subject: EPA Concurrence on Residual treated water in Pond 3
EPA Concurrence Pond3 Residual water 06.12.17.pdf

Dear Mr. Carey,

Thank you for the update. EPA has completed its review and provides the attached concurrence.

EPA requests that Water Board provide daily water quality parameter measurements (pH, specific conductance, temperature), as well as visual characteristics of the siphoned water (clarity, color, suspended matter). Please report these observations to EPA on a weekly basis. If the pH drifts outside of the discharge requirements (lower than 6.5 or above 8.5 Standard Units), please cease discharge of effluent, and notify EPA in a timely manner.

If you have any questions, please feel free to contact me at (415) 972-3003 or deschambault.lynda@epa.gov

Best Regards,

Lynda Deschambault

Environmental Scientist

USEPA Region 09

(415) 947-4183

Please be advised I may have limited access to email , therefore please be patient with any communication delays.

From: Carey, Douglas@Waterboards [mailto:douglas.carey@waterboards.ca.gov]
Sent: Wednesday, June 07, 2017 4:01 PM
To: Deschambault, Lynda <Deschambault.Lynda@epa.gov>
Cc: gr@burlesonconsulting.com; Ferguson, Scott@Waterboards <scott.ferguson@waterboards.ca.gov>; Stetler, Chris@Waterboards <Chris.Stetler@waterboards.ca.gov>; Zentner, Taylor@Waterboards <taylor.zentner@waterboards.ca.gov>
Subject: Residual treated water in Pond 3

Lynda,

Now that spring treatment operations at Pond 3 have ceased, Water Board staff is planning for the removal and disposal of sludge contained in Pond 3 later this fall, if possible. Heavy equipment, including an excavator, will be used to remove the sludge from Pond 3 and to load it into trucks for hauling to an offsite disposal facility. Removing and hauling the sludge requires that the sludge in Pond 3 be sufficiently dry to be handled with heavy equipment and hauled without liquefying during these processes. Unlike the pit clarifier used for summer pond water treatment operations, Pond 3 does not have an underdrain to facilitate sludge dewatering. The last discharge of treated acid mine drainage (AMD) out of Pond 3 occurred on June 1, 2017. Despite efforts to remove as much treated AMD as possible, some treated AMD remains in Pond 3 adjacent to the overflow structure. Water Board staff anticipate that the removal of the

remaining treated AMD in Pond 3 will expedite the sludge dewatering process; therefore, Water board staff will initiate the use of a small siphon for the removal of treated AMD in Pond 3 using the existing Pond 3 overflow plumbing to Leviathan Creek. The siphon will have a maximum discharge capacity of approximately one gallon per minute and will be used 24 hours per day, 7 days per week until the remaining treated AMD in Pond 3 is removed.

During normal pond water treatment operations, using the pond water treatment plant adjacent to Pond 1 in conjunction with the pit clarifier, dewatering of sludge contained in the pit clarifier continues for a couple of weeks following the shut-down of the treatment plant. Compliance monitoring of treated water discharging out of the pit clarifier is outlined in the Water Board's approved 2017 Work Plan (see Section 3.2) and states *"Because dewatering of the sludge continues even after the treatment season is complete, treated effluent will continue to flow at low rates after treatment stops. Consistent with the past years, effluent sampling will continue until treated effluent flow rates drop below approximately 5 gpm."*

As the siphoned discharge out of Pond 3 will be well below the 5 gallons per minute threshold required for continuing effluent sampling, no additional compliance samples will be collected. Water Board staff would like to implement the siphon out of Pond 3 by no later than the end of this week.

Please let me know if you concur with this approach for removing treated AMD from Pond 3 at your earliest convenience or if you have any questions.

Douglas Carey, P.G.

Senior Engineering Geologist

Leviathan Mine

Regional Water Quality Control Board, Lahontan Region

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