



044-010-074 M-27

## Department of Toxic Substances Control



Linda S. Adams  
Secretary for  
Environmental Protection

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8800 Cal Center Drive  
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Arnold Schwarzenegger  
Governor

September 30, 2010

Mr. Mike Israel  
Amador County Public Works  
810 Court Street  
Jackson, California 95652

Ms. Marilyn Van Horn  
4193 King Author Court  
Palo Alto, California 94306-3826

### ARGONAUT MINE TAILINGS DAM, JACKSON, CALIFORNIA

Dear Mr. Israel and Ms. Van Horn:

The California Department of Toxic Substances Control (DTSC) has been the regulatory agency for the environmental investigation and cleanup of the Argonaut Mine tailings. DTSC has observed the Argonaut mine tailings dam during the last four years of our investigation. At this date, only sampling activities have taken place on the site, no change in drainage of rainwater has occurred. My observations of the current condition of the dam have caused me concern. The integrity of the dam was brought up during Jackson City's site visit with their consultants and DTSC on the proposed Sutter Street Extension that would be located in close proximity to the dam. The apparent disrepair of the dam is of great concern to DTSC.

Assessment of the condition of the dam is not within DTSC's jurisdiction. I contacted the California Department of Water Resources (DWR) which oversees dams within the state. I spoke with Larry Ford at DWR about the Argonaut Dam. Mr. Ford was able to give me a timeline of DWR's action concerning the Argonaut Mine.

- 1917 - Argonaut Mine NO. 478 (OJ) was constructed sometime around 1917.
- 1929 - An application for a prior dam construction was filed with the Division.
- 1932 - A certificate of approval for the dam was issued.
- 1933 - A Legislative Act amended the Division's responsibilities from dams impounding 10 acre-feet to those impounding 15 acre feet, which excluded Argonaut Dam.
- 1937 - Argonaut Dam was inspected to confirm that there had been no changes

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- 1975 - Argonaut Dam was inspected to confirm that there had been no changes

Mr. Ford explained that Dams that impound less than 15 acre feet of water are the responsibility of the County in which the dam is located. Amador County should have received a letter from DWR around 1933 when the dam left DWRs jurisdiction and became the responsibility of Amador County.

The Argonaut Dam is listed as being 46 feet in height. It was built to contain the tailings and debris from the Argonaut Mine activities from entering Jackson Creek. At the last site visit in 2009, the material behind the dam was within four feet of the top of the dam. During heavy rains, water circumvents the dam to the south and also pours over the top of the dam (I have enclosed a picture of this happening). DTSC took soil samples from behind the dam to analyze for arsenic contamination. These borings were up to a depth of 35.5 feet below ground surface (bgs). The soil borings indicate that at a depth of 34 feet bgs the tailings were wet which increases the ability of the tailings to flow. The dam is located in a steep ravine/creek bed which ends near Highway 49 and across from the commercial area of the city of Jackson. There is a potential for the dam to fail and tailings to move down gradient along the creek bed or Sutter Road to Highway 49.

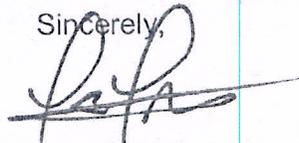
Attached are pictures of the condition of the dam and what happens during heavy rain events.

This letter is to inform both the land owner and the Amador County Public Works Department of the observed condition and possible consequences of a failure of the Argonaut Dam. It may be prudent for responsible entities to assess the need to take preventative measures associated with the condition of the dam.

Attached are pictures of the Argonaut Mine Dam.

If you would have any questions, please contact me at (916) 255-3747.

Sincerely,



Tami Trearse  
Engineering Geologist  
Brownfields and Environmental Restoration Program

Attachments

cc: See next page.

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Ms. Marilyn Van Horn  
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cc: Mr. Larry Ford  
Department of Water Resources  
1416 9th Street  
Sacramento, California 95814

Mr. Mike Daly  
City Manager  
Jackson City Hall  
33 Broadway  
Jackson, California 95642

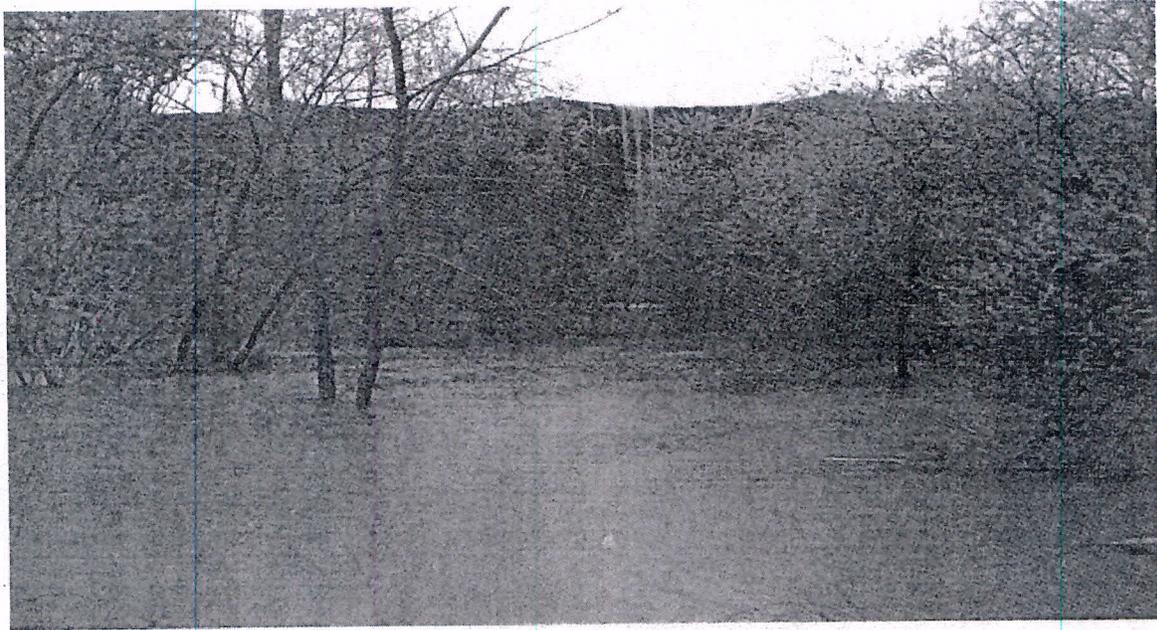
Mr. Ken Foley  
Attorney at Law  
116 Court Street  
San Andreas, California 95249-1269



Section of Face of Argonaut Mine Dam



Close-up of blackberry bushes growing in cracks in dam.



Rain water runoff flowing over the top of Argonaut Mine, April 4, 2006.



Rain water runoff flowing over the top of Argonaut Mine, April 4, 2006.

September 25, 1933

Argonaut Mining Company  
Jackson, Amador County  
California

Attention: Mr. W. E. Scott, Jr.  
SUBJECT: ARGONAUT DAM #478

Gentlemen:

There was adopted at the recent session of the State Legislature and approved by the Governor an amendment (Chapter 208, Statutes of 1933) to Section 2 of the Act Governing the Supervision of Dams (Chapter 766, Statutes of 1929) as follows: "The word 'dam' whenever used in this act shall mean any artificial barrier, whether heretofore or hereafter constructed, together with appurtenant works, if any, across a stream channel, water course or natural drainage area, which does or may impound or divert water, which is or will be either twenty-five feet or more in height from natural streambed to crest of spillway, or which has or will have an impounding capacity of fifty acre feet or more; provided, however, that any such barrier which is or will be not in excess of six feet in height, regardless of storage capacity, or which has or will have a storage capacity not in excess of fifteen acre feet, regardless of height, shall not be considered a dam within the meaning of this act; and provided further, that no obstruction in a canal used to raise or lower water therein or divert water therefrom shall be considered a dam within the meaning of this act."

In accordance with the terms of this Act as amended and the information of record in this office the department will no longer have jurisdiction over the above dam after the effective date of this amendment (August 21, 1933). Any orders or approvals previously issued will, on that date, be of no further effect and thereafter no action concerning this dam will be taken by the State Engineer nor be required of you by the State Engineer unless the dam is altered or operated in such a manner as to again bring it under jurisdiction within the terms of the Act as amended.

Very truly yours,

cc-Debris Commission

  
STATE ENGINEER