



Association of Environmental & Engineering Geologists San Francisco Section

ANNOUNCING THE AEG SAN FRANCISCO SECTION FEBRUARY 2010 MEETING

Reclamation of the Jamestown Gold Mine, Jamestown, CA Julian C. Isham, Shaw Environmental, Inc.

MEETING DETAILS

Restaurant

Sinbad's
Pier 2 Embarcadero Street
San Francisco, CA

[Map](#)

Date and Time

Tuesday, February 9th, 2010
6:00 pm—Social Hour and Sign-in
7:00 pm—Dinner
8:00 pm—Presentation

Cost: \$40 Members; \$50 Non-Members, \$20 for Students

Meal Choices:

- Salmon Florentine
- Snapper
- London Broil
- Chicken Picatta
- Shrimp Louis
- Vegetarian Pasta

Reservations*: To RSVP, fax or e-mail Sachiko Tanikawa by **12 PM, Friday, February 5th**.
(fax: 1-866-400-4068, email: treasurer@aegsf.org) with the following information:

Name: _____ Phone/e-mail: _____ Meal choice: _____

Driving Directions: From the Bay Bridge, take the Fremont Street Exit and the Folsom Street Ramp. Go left (east) on Folsom Street, then left (north) onto the Embarcadero (Herb Caen Way). The driveway for Sinbad's is on the right, south of the historic Ferry Building. Please watch out for the pedestrians and cyclists when turning into the driveway. Thank you.

BART Directions: Exit the Embarcadero Station; walk up Market Street toward the Ferry Building (less than ½ a mile toward the Bay and to the east). Cross Embarcadero and Sinbad's is located next to the Alameda ferry pier on the south side the historic Ferry Building.

Parking: \$4 valet parking is available or there are meters located on nearby side streets.

*Please RSVP in advance. Walk-ins are welcome, but not guaranteed. No shows will be charged.

See next page for abstract and speaker biography.

Reclamation of the Jamestown Gold Mine, Jamestown, CA

Julian C. Isham, Shaw Environmental

ABSTRACT

The Jamestown Mine is a gold mine that was operated by Sonora Mining Company from 1986 to 1994. The mine facility consists of three mine pits (including the Harvard Pit), the Tailings Management Facility (TMF), a Waste Rock Storage Area (RSA), the Process Water Retention Pond (a lined Class II surface impoundment), and several storm water retention ponds. The presentation will describe the work completed to date, which includes:

- Dewatering of the 80-acre supernatant pond on the TMF and transferring over 300 million gallons of tailings supernatant and subdrain water to the Harvard Mine Pit,
- Closure and capping of the 130-acre tailings impoundment with onsite soil to meet California and RCRA final cover standards, which required a 2-foot minimum thickness including a 1-foot layer of low permeability soil (1×10^{-6} cm/sec),
- Crushing and screening over 420,000 cubic yards of onsite shale to produce low-permeability soil for the tailings impoundment cap,
- Evaluation of the 100-acre RSA cover and characterization of the waste rock,
- A site investigation to determine the extent of impacts to groundwater,
- Evaluation of water treatment technologies for groundwater and mine pit water impacted by arsenic and salts.

Under the terms of the contract, Shaw assumes environmental responsibility for operation and maintenance of the mine site for a 10-year period. The key technical issues were the following:

- Was there enough stockpiled weathered rock to cap tailings impoundment?
- Could we turn the shale back into clay for the low permeability cover layer?
- What potential changes in environmental regulation could occur over a 10-year period?

Most unknown regulatory issues are covered by cost cap environmental insurance obtained from AIG, which will safeguard us, the State, and the Jamestown Trust from unforeseen cost over runs.

SPEAKER BIOGRAPHY

J.C. Isham, Client Program Manager with Shaw Environmental, Inc. was recently appointed to the California Central Valley Regional Water Quality Control Board by Gov. Arnold Schwarzenegger. J.C. recently served two terms on the California State Mining and Geology Board. During his appointment, he served as chairman of the mining standards committee and vice chairman of the seismic mapping committee. J.C. also has served as chairman of the legislative committee for the Board for Geologists and Geophysicists. J.C., who was one of the first hydrogeologists to be licensed in the state of California (CHG. 007), is also a member of the California Groundwater Resources Association, California Construction and Industrial Minerals Association, Society of Mining, Metallurgy and Exploration, Northwest Mining Association, Association of Engineering Geologists, Engineers and Architects Conference Committee of California, and National Ground Water Association.

Thank you for the RSVP! See you on Tuesday, February 9th, 2010