From: Jacobson, Erik B (RegRel

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Cc: Tse, Rick (rick.tse@cpuc.ca.gov); 'valerie.beck@cpuc.ca.gov' (valerie.beck@cpuc.ca.gov)

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Subject: Kern Asbestos Testing Results

Ron,

As you know, PG&E contracted with RGA Environmental to resample the refractory material on the boilers of the Kern Power Plant. On site May 27-29, RGA completed the sampling survey of the refractory materials in the KPP boiler structures. For safety and accessibility, the survey performed by RGA focused on the exposed bottoms and also the lower front and sidewall areas of the felled units. RGA accessed sampling locations from the ground as well as from a boom-type man-lift. The refractory survey report including the lab analysis is attached.

Survey Results

RGA's survey and sampling of the boiler refractory materials resulted in the identification and sampling of seven (7) unique, suspect materials including various types of tile (brick), tile grout, mortar and castable refractory material. A total of 83 samples were collected during this survey. The following results were obtained by lab analysis.

1. All of the native refractory brick, grout and castable materials analyzed were asbestos free.

2. Twenty-three (23) of the samples were identified to contain a separate layer referred to by the laboratory as "surface fibrous debris" located on the exterior facing refractory that contained detectable concentrations of asbestos.

3. Of these twenty-three (23) samples, sixteen (16) had detectable amounts of ACM >1%. Information obtained from RGA and evaluation of the analytical data suggests that the presence of the "surface fibrous debris" described by the laboratory resulted from possible contact contamination with ACM materials sometime over the manufactured life of the refractory. The surface contaminated refractory materials (16 of 83, or 19%) were found in each of the four boilers with no readily apparent pattern based on sample location and varied in percentage concentrations.

Conclusions

RGA has indicated that the presence of asbestos-containing materials identified during the survey is not necessarily the result of a failure to perform asbestos abatement in accordance with regulations and common work practices. This material would not have been identified during a visual inspection typically performed after abatement of TSI.

The physical nature of the ACM found on the refractory materials is unique in that this material is not visible to the naked eye. The deposition of this contaminated layer could be the result of insulation contact during the operating life-cycle of the boiler.

PG&E and Silverado are in the process of revising the demolition workplan to address the presence of asbestos-containing materials on site. Demolition of the boiler structure is on hold until these revisions are finalized.

In addition to the refractory material, approximately 20 cubic feet of Thermal System Insulation (TSI) material has been identified inside the boiler structure. Samples of the material collected by RGA were found to contain asbestos in excess of 1%. These concentrations appear to be consistent with boiler TSI samples reported by Forensic Analytical in the original asbestos survey performed in January 2012. Silverado will treat all refractory material as contaminated as well as TSI material recovered during the demolition process.

Please let me know if you have any questions or would like to discuss further.

Best regards,

Erik

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