

**Park City
Document Review
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<p>California/Comstock Mill Innovative Assessment September 2000</p>	<ul style="list-style-type: none"> • 2 mills located approximately 2.6 miles SW of Park City; • Located within source protection area for 3 of PC's municipal water sources (Spiro Tunnel, Spiro Bulkhead, and Thiriot Spring) which provide 47% of water supply for PC; • One acre of heavy metal laden mill tailings exists between the mills; • Untreated water from municipal water sources: As 70 ug/L; treated through municipal treatment: Asc 12 ug/L; • Samples: <ul style="list-style-type: none"> ○ Source: As 167 mg/kg, Pb 58000 mg/kg ○ Sediment (down gradient): As 185 mg/kg, 15800 mg/kg
<p>California Mine and Comstock Mine and Mill Site Sampling Memo April 2014</p>	<ul style="list-style-type: none"> • Preliminary remediation plan was prepared by UPCM in May 1999, but has not been implemented; • Remediation plan: excavation of stream channel materials, construction of a tailings repository, capping existing tailings and waste piles, construction of a wetland biotreatment system for the drainage from the California Mine adit; • California Mine waste rock: 0.61 acres; • Comstock Mine and Mill: 1.4 acres; • Samples <ul style="list-style-type: none"> ○ Waste Pile (California): As 306 mg/kg, Pb 1180 mg/kg ○ Waste Pile(California): As 273 mg/kg, Pb 12600 mg/kg ○ Waste Pile(California): As 423 mg/kg, Pb 2670 mg/kg ○ Sediment (California: downgradient of confluence of adit drainage and Thaynes Canyon before Comstock): As 165 mg/kg, Pb 41200 mg/kg ○ Waste Pile (Comstock): As 203 mg/kg, Pb 4600 mg/kg ○ Waste Pile (Comstock): As 272 mg/kg, Pb 4420 mg/kg ○ Sediment (Comstock: downstream of Comstock): As 50.5 mg/kg, Pb 25700 mg/kg
<p>Treasure Hollow Innovative Assessment September 2000</p>	<ul style="list-style-type: none"> • One acre of mining waste-1000 feet west of Silver King Mill; • One mile southwest of PC; • Located within source protection area for 3 of PC's municipal water sources (Spiro Tunnel, Spiro Bulkhead, and Thiriot Spring) which provide 47% of water supply for PC; • Samples: <ul style="list-style-type: none"> ○ Source: As 144 mg/kg, Pb 1940 mg/kg ○ Sediment (drainage path below waste rock): As 59 mg/kg, Pb 275 mg/kg

<p>Treasure Hollow Innovative Assessment Update April 2014</p>	<ul style="list-style-type: none"> • 12 acres, manicured as a ski slope; • Waste rock pile comprised of consistent material; grey in color with coarse angular material on surface and angular gravel and fine grained subsurface material; • Settling pond at base of waste pile with drain pipe leading down slope; • 1.17 miles downstream toward Park City, short length of Treasure Hollow near base of slope where stream channel is open and accessible; • Sampled transect of pile; • Samples <ul style="list-style-type: none"> ○ Source (fine grained material near drain pipe that runs down slope): As 694 mg/kg, Pb 4570 mg/kg ○ Sediment (1.17 miles downstream): As 28.3 mg/kg, Pb 193 mg/kg ○ Sediment (settling impoundment): As 244 mg/kg, Pb 2580 mg/kg • Update recommends site closure based on: <ul style="list-style-type: none"> ○ Blow PRGs for recreation uses in the human health risk assessment for Richardson Flat; ○ Engineering controls are successful in keeping fine grains from being mobilized offsite; ○ Not connected to Silver Creek drainage.
<p>Ontario Mine and Mill Ontario Mill Innovative Assessment September 2000</p>	<ul style="list-style-type: none"> • 4 acres 0.5 mile south of PC; • Silver Creek located one mile downgradient of Mill; • Ontario Mill was an amalgamation mill so mercury contamination poses a threat; • Anticipated that groundwater flows toward Silver Creek and through town. • No samples.
<p>Ontario Mine Innovative Assessment September 2000</p>	<ul style="list-style-type: none"> • One mile south of PC; • Mine located adj to State Rd 224, on west side of road; • Previously Park City Mine Adventure; • Site one mile upgradient of the convergence of Woodside Gulch, Empire Canyon, and Ontario Canyon; • Site visit: noted tailings located immediately adjacent to road being washed down the canyon by overland water flow; • Site sits on 3 acres; • Soil/source material in area of mill are discolored with yellow/orange tint atypical of other soils in area and barren of vegetation; • No samples

<p>Ontario Mine Shaft #3 Innovative Assessment April 2014</p>	<ul style="list-style-type: none"> • Site is no longer active museum; • Mine buildings and parking area built on waste rock material; • Parking lot covered with asphalt; • Waste rock piles were recontoured during highway construction; • Clean fill and revegetation evident on steep slope of the waste rock pile at the Shaft 3 mine; further down the canyon to the north, waste rock pile contains sparse vegetation and not been covered with clean material; • Samples <ul style="list-style-type: none"> ○ Source (toe of waste rock pile on western slope of Ontario Canyon): As 199 mg/kg, Pb 2570 mg/kg ○ Source (toe of slope along eastern side of Ontario Canyon): As 194 mg/kg, Pb 958 mg/kg ○ Sediment (drainage below site): As 515 mg/kg, Pb 450 mg/kg • Steep slope prevents visitor exposure.
<p>Ontario Drain Tunnel #1 and Judge Loading Station April 2014</p>	<ul style="list-style-type: none"> • Site consists of original Ontario Drain Tunnel #1 from 600 foot level of Mine Shaft #3 and Judge Loading Station; • UPCM has conducted surface and subsurface sampling and proposed draft remediation work plan for the site; • Site has been considered for affordable housing development (Draft Marsac Avenue Affordable Housing Mine Waste Remediation Work Plan); • Innovative Assessment update recommends site remediation and closure according to UPCM's work plan; • Samples <ul style="list-style-type: none"> ○ Waste material: As 233 mg/kg, Pb 56,900 mg/kg ○ Upper level rail bed: As 16.1 mg/kg, Pb 794 mg/kg • UPCM provided data from subsurface investigation in 2008: 15 test pits showing Pb contamination above 500 mg/kg down to 8 feet in some locations.
<p>Silver King Mill Innovative Assessment September 2000</p>	<ul style="list-style-type: none"> • Total surface area of abandoned buildings and mine waste piles ~20 acres; • Samples <ul style="list-style-type: none"> ○ Source (waste materials-eastern slope Woodside Gulch): As 252 mg/kg, Pb 4520 mg/kg ○ Sediment (drainage pathway in Woodside Gulch 1000 feet north of Mill): As 675 mg/kg, Pb 10,200 mg/kg; • Soil in immediate area of mill-discolored with yellow/orange tint, coarse-grained.

<p>Silver King Mine and Mill Innovative Assessment April 2014</p>	<ul style="list-style-type: none"> • 4.6 acres; • old mine shaft building, mill building, sampler foundation, water tanks, waste rock and tailings piles, and a large waste disposal pile area down slope from the mine and across Woodside Gulch from the mill building; • waste pile consists of varying size (fine to coarse grain) and color (grey to reddish tan) material; • Waste pile sample 1: As 173, Pb 3730 • Waste pile sample 2: As 160, Pb 3240 • Waste pile sample 3: As 184, Pb 3640 • Sediment: As 28.9, Pb 597 • Entire stream reach along site has undergone removal and remediation (which explains low results for sediment sample); • 1998 UPMC covered mine waste in and around building and conducted stream channel restoration downstream ~2000 feet.
<p>Marsac Mill Site Reassessment Report August 2013</p>	<ul style="list-style-type: none"> • 4 acres, 2 parking lots, city ahl, old China Bridge parking structure, and new China Bridge parking structure; • 10/1997 soil samples from north parking lot: Pb range 870 mg/kg to 3670 mg/kg; • 1998: limited subsurface investigation in asphalted parking and roadway areas <ul style="list-style-type: none"> ○ 7 geoprobe borings-17 soil samples collected: Pb range 234 to 11260 mg/kg • 1999 VCP <ul style="list-style-type: none"> ○ Removal/capping of north half of site; ○ Park City Soils Ordinance for south half of site; • 03/2003: DERR issued PC Certificate of Completion for north half of site, with conditions limiting land use, water use, and requiring compliance with site management plan • 2004: groundwater assessment-likelihood of groundwater problems low; • 2008: new China Bridge parking structure built; all excavated soils disposed of at Richardson Flat; • Unlikely that soil pathway on VCP project continues to pose threat to human health or environment but soils in the vicinity may continue to be of concern, as contamination was found offsite; • Sediments and surface water samples collected from Empire and Silver Creeks both up and downstream of site; metals contamination present in Empire Canyon samples
<p>Upper Silver Creek Watershed Analytical Results Report July 2000</p>	<ul style="list-style-type: none"> • Water quality assessment-Upper Silver Creek Watershed Stakeholder's Group; • Sampling event for high flow conditions; • 26 surface water samples; • Sample results: <ul style="list-style-type: none"> ○ As range: ND to 0.009 mg/L ○ Pb range: ND to 0.084 mg/L • Study area: Silver Creek tributary/drainages south of Park City downstream to below Richardson Flat tailings impoundment and Thaynes Canyon

<p>Upper Silver Creek Watershed Analytical Results Report- Addendum Feb 2001</p>	<ul style="list-style-type: none"> • Additional sampling-low flow conditions <ul style="list-style-type: none"> ○ 14 surface water samples; ○ 16 stream bed sediment samples
<p>Empire Canyon Expanded Site Inspection Report Feb 2003</p>	<ul style="list-style-type: none"> • Majority of samples collected from UPCM land, but 3 residential properties on Daly Avenue were sampled; • Surface water samples: high drainage samples contained significantly lower inorganic constituents than lower drainage samples-indicative of erosion of tailings material into lower drainage; • Soil samples focused on canyon bottom and distinct mining related features; • 2 of 3 soil samples collected from Daly Avenue properties exceeded SCDM benchmarks for Arsenic, as well as exceeding 1500 mg/kg for Pb; • Samples (b/n April 30 and Oct 16, 2001) <ul style="list-style-type: none"> ○ 22 surface water; ○ 15 sediment; ○ 26 soil.