Oregon Water Resources Department

Calico – Grassy Mountain

State Agency Workshop

November 16, 2017

OWRD Permits/Reviews Potentially Required

- 1) Water right for mining/industrial use
 - Existing permit G-10994 in place
- 2) Dam safety approval for tailings impoundment
 - No permit required unless stored water under water right
 - Dam safety rules (ORS 540.350-540.390) only apply if:
 - Dam height > 10 feet **OR**
 - Storing > 9.2 AF
 - ORS 540.350; Written approval of plans and specifications required if dam failure, in the judgement of the Water Resources Commission, would likely result in damage to life or property.

Permit G-10994

- Total of 2.0 cfs authorized for mining/industrial uses
 - Includes exploration, mineral processing, dust suppression, culinary
- Priority date: 08/29/1988 for two 500' deep wells (primary)
- Priority date: 11/15/1988 for open-pit mine (supplemental)
- Permit extension approved through October 2028
- According to current OWRD records, authorized POA locations correlated to wells:
 - MALH 2275; depth = 555'; yield ~ 0.2 cfs
 - MALH 2278; depth = 400'; no water
 - Open-pit mine will not be available

Water Right Concerns

- Existing POA wells are not likely sufficient to develop right
 - Will need to add POAs
 - Mine decline may be considered if groundwater encountered
 - Timing?
- Pumping from POA wells may interfere with nearby spring rights
 - Shallow aquifer system likely feeding local springs

Permit Amendment Process

- Requires formal application that will consider:
 - Whether proposed POA wells develop from the original source
 - Whether adding or changing POA locations will result in additional interference with nearby users
 - Whether the proposed changes will result in additional interference with nearby surface water
- Process may take between 1-2 years to complete, unless reimbursement authority is requested (FO within ~120 days)
- Is permit amendment required to be part of consolidated application?

Certificate Issuance

- Requires a Claim of Beneficial Use (COBU)
 - A report that describes the (final) use developed under permit
 - A map that identifies (final) locations of developed POA wells
 - A pump test involving at least one of the permitted POA wells
- Determine the extent of beneficial use under the permit
- Claim to be filed before 10/01/2028, unless extension filed and approved

Acceptable Uses under Mining/Industrial (OAR 690-300-0010)

(27) "Mining Water Use" means the use of water for extraction, preliminary grading, or processing of minerals or aggregate at a mining site or construction, operation and maintenance of a mining site. These uses include, but are not limited to, general construction, road construction, and dust control. Examples of mining include, but are not limited to, aggregate, hard rock, heap leach and placer mining.

ODFW Chemical Process Mining Rules

CALICO GOLD MINE PERMITTING WORKSHOP NOV 16, 2017

ODFW Responsibility

- ► Cooperating Agency ORS 517.952
- ORS 517.956 Protection measures for fish and wildlife shall be consistent with policies of the State Department of Fish and Wildlife
 - ▶ Wildlife Protection Plan
 - Mitigation
 - No Loss of T&E critical Habitat
 - Mortality Monitoring and Reporting
 - ▶ Restoration
- ORS 517.988 Fish and wildlife protections shall be included in the permit

Fish and Wildlife Protection Rules

- ► OAR 635-420-0020 thru 0050 Wildlife Protection Plan
 - ▶ Objective zero wildlife mortality
 - Describes standards for fencing, coverings, and other protection measures
- ► OAR 635-420-0060 Wildlife Mitigation Plan
 - Mitigation to comply with ODFW Mitigation Policy OAR 635-415
 - ▶ Sage Grouse Mitigation OAR 635-140
 - ►DLCD Sage Grouse Habitat Protection Standards OAR 660-023-115

Fish and Wildlife Protection Rules

- ► OAR 635-420-0070 Wildlife Injury and Mortality Monitoring
 - ▶ Ongoing Monitoring and Maint. of protective measures
 - ▶ Quarterly Reporting Next day reporting for some incidents
 - Scientific Taking Permit OAR 635-043 to collect and preserve mortalities

- Other *Not applicable per Calico's current plans
 - ► OAR 635-412 Fish Passage
 - ► OAR 635-425 In Water Blasting
 - ► Follow In Water Work Guidelines