

# Water Modeling Process 5/9/12

KEY

Task done

Task not done but active

Task not done and inactive

## IAP Process

(1) Work plans and data package completion

## Model True-Up

(2) Develop Co-lead task I QA/QC plan

(5) Develop mine and plant site model calibration methodology

(6) Incorporate available new mine site groundwater data

(3) Implement task I QA/QC mine Site

(4) Implement task I QA/QC plant site

(7) Review mine and plant site calibration results (iterative modeling process)

(8) Approve calibration

(9) Calibrate model

(12) Develop and review Mine Site QAPP

(13) Develop and review Plant Site QAPP

(14) Comprehensive results review (with ECs and approved CDFs)

(11) Record model parameter changes via CDF(s)

(10) Approve/reject proposed modeling parameters (includes MODFLOW and Plant Site Runoff re-calibration)

(15) Develop task II QA/QC plan

(16) Implement task I and II QA/QC (mine and plant site, with ECs and approved CDFs)

(17) Water model functionality (with ECs and approved CDFs) accepted by agencies

## Project Refinement

(21) Approve Adaptive Mitigation Management Plan with agreed-to EC performance parameters (SDEIS level)

(20) Proposed Project presented for impact evaluations

(18) Calibration statistics and goodness of fit justification document

(19) Mine Site Runoff chemistry recalibration and approval

(22) Data sufficiency document (HCT, other data)

(23) Possible Ripple Effects Analysis

### Alternatives & Mitigation

(26) Possible analysis of new agency-mitigation or alternative

(25) Record Proposed Project (including AMP) changes via CDF(s)

(24) Review Proposed Project performance

(27) Identify Environmentally Preferred Alternative

(29) Implement task I and II QA/QC (mine and plant site)

(28) Proposed Project performance acceptable

## Documentation

(30) PolyMet updates data packages and work plans and adds results interpretations; provides Mine Site GW sensitivity analysis and uses EPA equation; updates project description and AMMP per CDFs and other management plans

(33) One final audit-level review of documents (ERM and Agencies) and comments to ERM

(34) Complete Draft Chapters

(31) A set of documents/files TBD distributed to Cooperators

(32) Cooperators review info and Co-lead coordinate with Cooperators

