

CTP/GCS PROGRESS

Basin Environmental Improvement Project Commission

March 11, 2020

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Attachment B CIA Groundwater Collections System Design Concept



CTP/GCS PROJECT OVERVIEW

ODBO CONTRACT MILESTONE DATES

- RECENT/CURRENT CORPS OF ENGINEERS LEAD TASKS – REWIND 2016

- ▶ Contract Award – June 2016
- ▶ Award Protested – June 6, 2016
- ▶ RFP Amendment Issued – June 30, 2016
- ▶ Revised Proposal Submission Deadline – Aug. 5, 2016
- ▶ Review Proposals/Issue Source Selection Decision
- ▶ Issue Award – within next 90 days – Actual Dec. 2016
- ▶ Fast Track design – thru 2017
- ▶ Initiate Fast Track Construction – early 2018
- ▶ Design Typical Track – Late 2017 thru 2018
- ▶ Anticipated Construction Completion ~ 2019

Milestone Reached



FIRST FIELD ACTIVITIES –PRE-DESIGN GEOTECHNICAL INVESTIGATION, APRIL 2017

2018 CTP/GCS CONSTRUCTION PLANNED

- ▶ Install & Operate Temporary Treatment System
- ▶ Commence Construction of Permanent CTP Upgrades
- ▶ Demolish existing features (polishing pond, head house, pumphouse, reactors)
- ▶ Remove cover from footprint and construct new lined Sludge Impoundment
- ▶ Demolition of Billboards - began 5/21
- ▶ Begin construction of Slurry Bentonite Cut-off Wall
- ▶ Install Extraction Wells
- ▶ Complete any Remaining designs (D/B/O)

CTP OVERVIEW - MAY 2018



► Existing Mixing/Aeration/Flocculation Tanks



DEMOLITION OF OLD MIXING/AERATION BASIN/FLOC TANKS– OCT 2018

SLURRY BENTONITE CUT-OFF WALL CONSTRUCTION - 2018





MAINTENANCE VAULTS
ON GCS PIPELINE



TYPICAL G/W EXTRACTION WELL,
CONTROLLER/BACKUP POWER GENERATOR



LOTS OF ACTIVITIES: FORMING/CONCRETE
PLACEMENT– NOV 2018



CONCRETE FORMS – FILTER BUILDING SLUDGE THICKENER APRIL 2019



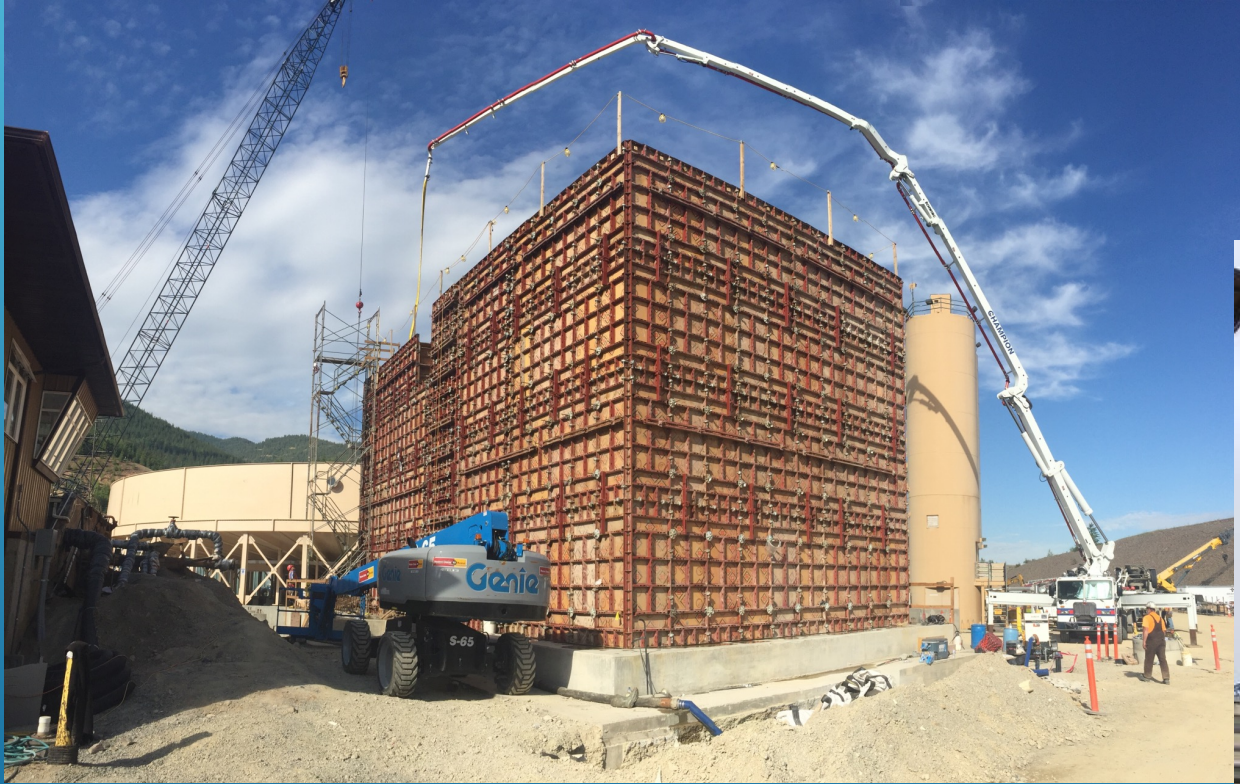
PROGRESS – JUNE 2019



NEW SLUDGE THICKENER – PRIOR TO SLUDGE -SUPPORT STRUCTURE



30' TALL REACTOR TANK CONCRETE FORMING/ PLACEMENT - FINISHED 2019





FILTER FEED PUMPS



ELECTRICAL CONTROL



SWITCH BANK



TEMPORARY TREATMENT SYSTEM – DE-MOBE SOON



EXISTING CLARIFIER/EXISTING CONTROL BLDG
ROOF - LEFT FOREGROUND



INTERIOR FILTER BLDG. – FILTER VESSELS, DIRTY BACKWASH TANK, POLYMER TANK



FLYING THE BRIDGE ONTO THE THICKENER TANK, JUNE 2019

THE NEW EMBEDDED, LINED SLUDGE IMPOUNDMENT CELLS

Includes leachate collection
system. Leachate routed back to
CTP





BUILDING SLUDGE IN NEW THICKENER

- ▶ Construction Acceptance Testing
- ▶ Equipment/System Testing
- ▶ Integrated System Testing
- ▶ Operate Integrated System

TESTING PHASES PRESCRIBED BY CONTRACT

BLEEDING AIR FROM THE
CONVEYANCE LINE
UPSTREAM OF THE
PRESSURE SUSTAINING
VALVE





IN WATER DIFFUSER INSTALLATION/COFFER DAM– SEPT 2019



MARCH 5, 2020 TEST FLOWS @ 3000 GALS/MINUTE – NO
OBSERVABLE SIGN IN RIVER

- ▶ Operation of the upgraded CTP(sans filters) 24 hrs/day starting 3/5 (treating only mine water at this time, will add in G/W after testing)
- ▶ Operated 8 of 9 extraction wells simultaneously and transmitted for storage/treatment on March 4 to calibrate the pressure sustaining valves on reactor pipelines and Lined Pond Pipeline

RECENT MAJOR MILESTONES

WHAT IS CURRENT STATUS?

- ▶ Construction Acceptance Testing - completed for majority of components.
- ▶ System Testing nearing completion on many components
- ▶ Integrated Facility Testing has begun
- ▶ Treatment Ops have begun shifting to new reactor, building sludge in new thickener.

- ▶ GWCS System Testing of Overall GWCS – March 12
- ▶ Test Building Envelope Seal – March 12
- ▶ Prepare for Individual Well Testing –March 23
- ▶ Close Gaps in Slurry-Bentonite Cut-off Wall - April
- ▶ Install New Pumps in Existing Clarifier – April
- ▶ Retrofits on Existing Clarifier – Summer
- ▶ Load Media in new filter vessels
- ▶ Test Filtration System
- ▶ Integrated System Test with GCS/Fully Operational CTP
- ▶ Hook-up piping from Lined Pond to new reactor
- ▶ Demobilize Temp. Treatment System
- ▶ Operate CTP/GCS for 1 full year

NEXT STEPS

Questions?



PANORAMA FROM SLUDGE THICKENER BRIDGE – JAN 2020