# Handout 10B Schedule Highlights Summary of Key Schedule Changes

Consultative Work Group Meeting November 9, 2022

## **Schedule Highlights**

Text in "red font" represents updates from last CWG (6/22/22)

Phase 1: NTH IRZ\* and Supporting Components, Monitoring Wells, Riverbank Wells\*, Pipelines, Remedy-produced Water Conditioning Tank Farm

- Phase 1 Construction, Startup, and Initial Operation 10/2/18 to 6/24/22
  - Progress and schedule are communicated via:
    - Daily list of construction activities
    - Weekly emails of 6-week look ahead
    - Monthly progress reports
    - Quarterly progress reports (focuses on operations & maintenance)
    - CWG schedule updates
- Switch from Temporary (Portable Generators) to
   Permanent Power (Topock Compressor Station) 3/24/22
- Remedy-Produced Water Conditioning system 6/24/22

<sup>\*</sup> Excludes northern IRZ well (IRZ-1), select IRZ well screens, and northern Riverbank Well (RB-1).

Phase 2A: TCS Recirculation Loop\*, Freshwater Injection Well (FW-2) and Associated Arsenic Monitoring Wells, Pipelines (Inside/Outside of TCS)\*

- Site Kick-Off Meeting 3/2/22
- Mobilization 2/14 to 3/7/22
- Pilot Borehole/Well Installation/Well Buildout 3/8/22 to 2/14/23
- Pipeline Installation 4/4 to 12/9/22
- Site Electrical/Instrumentation & Control 12/20/22 to 3/30/23
- System Integration/Functional Testing 3/21/23 to 5/31/23
- Phase 2A Start-Up 5/31/2023

<sup>\*</sup> Per 2015 BOD, TCS Recirculation Loop consists of 2 injection wells in TCS, 2 extraction wells on the Transwestern Bench, and 4 extraction wells in the East Ravine area. All planned wells will be installed in Phase 2A except for ER-3 and ER-4. These wells and the ER connecting pipeline are planned for Phase 2B. The pipeline connecting RB wells will be installed in Phase 2A.

Phase 2B: Inner Recirculation Loop\* IRL Wells, Freshwater Injection Well FW-1, Upland Monitoring Wells, Pipelines (Inside/Outside TCS), AZ Facilities to Convey Water from Freshwater Supply Well (HNWR-1A) to California

- Site Kick-Off Meeting 9/5/23
- Mobilization 9/5 to 10/2/23
- California Remedy Facilities 10/3/23 to 11/13/25
  - Upland Monitoring/Remediation Wells and ER-3/ER-4 10/3/23 to 11/12/24
  - Pipeline 4/25/24 to 5/29/24
  - Remaining TCS Facilities and MW-20 Bench 10/3/23 to 7/22/25
  - Site Electrical/I&C 5/30/25 to 11/13/25
- Arizona Remedy Facilities 10/30/23 to 7/16/24
  - HNWR-1A Buildout/Power/Site Civil/Security 4/15/24 to 7/16/24
  - Pipeline from AZ to CA 10/30/23 to 4/12/24

<sup>\*</sup> Per 2015 BOD, the Inner Recirculation Loop consists of 4 IRL wells in the uplands and 5 RB wells along the riverbank.

All IRL wells will be installed in Phase 2B. Four Riverbank Wells (RB-2, 3, 4, 5) were installed in Phase 1, with full buildout of RB-5 planned in Phase 2A and of RB-2, 3, and 4 planned in Phase 2B.

Phase 2B: Inner Recirculation Loop\* IRL Wells, Freshwater Injection Well FW-1, Upland Monitoring Wells, Pipelines (Inside/Outside TCS), AZ Facilities to Convey Water from Freshwater Supply Well (HNWR-1A) to California

- System Integration/Functional Testing 8/14/25 to 1/29/26
- Phase 2B Start-Up 1/29/2026

<sup>\*</sup> Per 2015 BOD, Inner Recirculation Loop consists of 4 IRL wells in the uplands and 5 RB wells along the riverbank. All IRL wells will be installed in Phase 2B. Four Riverbank Wells (RB-2, 3, 4, 5) were installed in Phase 1, with full buildout of RB-5 planned in Phase 2A and of RB-2, 3, and 4 planned in Phase 2B.

## Soil RFI/RI Reporting (Volume 3)

- Soil RFI/RI Report
  - Draft Report submitted 12/9/19
  - Review and Comment
    - Tribes and Stakeholder Review: 12/10/19 3/20/20
    - Agencies Review: 12/10/19 4/3/20
  - Response to Comments/Comment Resolution
    - Sent RTC Table: 10/30/20
    - Sent meeting agenda: 12/8/20
    - Comment resolution meeting held on 12/9 and 12/10/20

## Soil RFI/RI Reporting (Volume 3) (Continued)

## Soil RFI/RI Report (Continued)

- Revised Report submitted 5/31/2021
- Review and Comment
  - Tribes and Stakeholder Review: 6/1 8/31/21
  - Agencies Review: 6/1 9/24/21
  - PG&E reviewed comments/determined that a meeting is not needed to clarify comments from Tribes
- Response to Comments/Comment Resolution
  - Compiled comments into RTC Table: 10/22/21
  - Prepared responses to comments: 9/27-12/17/21
  - Sent RTC Table with responses to comments: 12/20/21
  - Held four comment resolution meetings: 2/9, 2/10, 2/17, and 2/18/22
  - Sent RTC Table with revised sections of Soil RFI/RI Report 9/30/22

## Soil RFI/RI Reporting (Volume 3) (Continued)

## Soil RFI/RI Report (Continued)

- Review and Comment
  - Tribes and Stakeholder Review: 10/3 12/30/22 (Target)
  - Agencies Review: 10/3/22 1/16/23
  - PG&E Review Comments/Determine If a Meeting is Needed to Clarify Comments
- Final Report April 2023 (to be verified after receipt of comments)
- Agencies Review/Approve May 2023 (to be verified after receipt of comments)

## Soil Risk Assessment (RA) Addendum

- A Soil Risk Assessment Addendum will be prepared after the implementation of the Soil NTCRA
  - Prepare/submit RA Addendum: 7/12/23
  - Tribes/Stakeholders review/comment: 7/13 8/23/23
  - Agencies review/comment: 7/13 8/29/23
  - Compile/prepare RTCs: 8/30 11/13/23
  - Review RTCs/comment resolution: 11/10 12/11/23
  - Finalize/submit RA Addendum: 12/12/23 1/9/24
  - Anticipate Agencies' Approval: 1/16/24
- Results of the approved Soil RA Addendum will be incorporated into the NTCRA Completion Report

## Soil Corrective Measure Study/Feasibility Study (CMS/FS)

- Prepare/submit draft CMS/FS: August 2024
  - Tribes/Stakeholders review/comment: 60 calendar days
  - Agencies review/comment: 75 calendar days
- Compile/prepare RTCs: Nov 2024
- Review RTCs/comment resolution: Nov 2024 -Feb 2025
- Finalize/submit final CMS/FS: Feb May 2025
- Anticipate Agencies' Approval: June 2025

## Soil Remedy Decision (Statement of Basis/Record of Decision)

- DTSC's Statement of Basis/Adoption of Remedy – Forecast Q2 2025
  - CEQA evaluation of the selected remedy will be conducted after Final CMS/FS

 DOI's Record of Decision – Forecast Q4 2025

### **Soil Non-Time Critical Removal Action**

**Engineering Evaluation/Cost Analysis (EE/CA), Action Memorandum** 

- Draft Soil Engineering Evaluation/Cost Analysis 5/29/20
  - Stakeholders/Public Review: 6/3 8/5/20
  - Tribal Consultation: 6/3 2/12/21
- DOI sent responses to comments 4/23/21
- DOI considers comments and makes final decision
  - Final EE/CA & Responsiveness Summary 10/12/21
  - Approval of Action Memorandum 10/12/21

### **Soil Non-Time Critical Removal Action**

**NTCRA Work Plan Preparation, Agency Approval** 

#### Draft NTCRA Work Plan – 10/29/21

- BLM sends Work Plan to Tribes: 11/1 11/4
- Tribal Consultation: 11/4 12/21
- DTSC Review/Comment: 11/1 12/28
- DOI Review/Comment: 11/1 12/20

### Response to Comments (RTC)

- PG&E compiles/prepares RTCs: 12/28/21 3/24/22
- Agencies/Tribes/Stakeholders review RTCs: 3/25 4/13/22
- Meeting to discuss RTCs/comment resolution: 4/26, 5/5/22
- FMIT review redline RTCs and provide inputs to redline RTC Table: 6/3/22
- Quechan and Cocopah Tribes concur with FMIT inputs: 6/6/22
- Chemehuevi concur with FMIT inputs: 6/7/22

### Final NTCRA Work Plan – Approved 6/27/22

- PG&E addresses/finalizes Work Plan 4/27 to 6/17/22
- DOI reviews/approves Work Plan 6/27/22

### **Soil Non-Time Critical Removal Action**

NTCRA Work Plan Implementation, Reporting, and Agency Acceptance

- Soil NTCRA Implementation July 2022 to May 2023
- Soil NTCRA Completion Report (incorporate results from the Soil Risk Assessment Addendum) – Forecast February 2024
- DOI review/accept report Forecast March 2024

## **Summary of Schedule Changes**

#### Handout 10B

#### Summary of Key Schedule Changes since August 15, 2007 (Rev. 51)

#### **Yellow** highlights are changes since June 22, 2022 CWG

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Activities	Forecast Schedule Deviation	Key Reasons	
Groundwater Remedy Construction			
Phase 2A Construction, Startup, and Initial Operation (Lines 1796-1811)  Soil RCRA Facility I (CMS/FS)		Time extension reflects adjustments made from remedy construction sequencing and implementation details.  rion (RFI/RI) and Corrective Measure Study/Feasibility Study	
RFI/RI Vol. 3 Reporting (Revised report, RTCs, Final, Approvals) (Lines 1029-1050)	<ul> <li>FF 7/8/2014 (Rev. 15)</li> <li>FF 10/1/2014 (Rev. 16)</li> <li>FF 8/18/2015 (Rev. 17)</li> <li>FF 12/29/2015 (Rev. 18)</li> <li>FF 7/26/2016 (Rev. 20)</li> <li>FF 10/25/2016 (Rev. 22)</li> <li>FF 10/24/2016 (Rev. 23)</li> <li>FF 2/7/2017 (Rev. 24)</li> <li>FF 2/22/2017 (Rev. 25)</li> <li>FF 6/27/2017 (Rev. 26)</li> <li>FF 7/25/2017 (Rev. 27)</li> <li>FF 2/16/2017 (Rev. 28 and 29)</li> <li>FF 11/15/2017 (Rev. 30)</li> <li>FF 10/29/2018 (Rev. 32 and 33)</li> <li>FF 12/17/2018 (Rev. 34)</li> <li>FF 2/7/2019 (Rev. 35 and 36)</li> <li>FF 9/24/2019 (Rev. 37 and 38)</li> <li>FF 6/9/2020 (Rev. 41)</li> <li>FF 9/7/2020 (Rev. 41)</li> <li>FF 9/7/2020 (Rev. 44, 45)</li> <li>FF 3/8/2022 (Rev. 46, 47)</li> <li>FF 5/6/2022 (Rev. 48)</li> <li>FF 10/31/2022 (Rev. 50)</li> <li>FF 5/26/2023 (Rev. 51)</li> </ul>	<ul> <li>Adjusted schedule to reflect current anticipated approval dateand scope of the Final Soil RFI/RI Work Plan.</li> <li>Cascading changes from Soil Work Plan approval and Soil EIR.</li> <li>Cascading changes from Soil Work Plan approval andimplementation.</li> <li>Cascading changes from Soil Work Plan implementation/DataGaps Analysis.</li> <li>Adjusted schedule to incorporate results from the soil risk assessment into the RFI/RI Vol. 3 Report, and to reflect a RTC process in accordance with the October 29, 2012 letter from DTSCto Tribes, titled Response to Comments Process - PG&amp;E Topock Compressor Station, Needles, California</li> <li>Cascading changes from Work Plan Implementation/Data GapsEvaluation.</li> <li>Schedule reflects implementation of Soil RFI-RI-RA RTCprotocol.</li> <li>Cascading changes from Soil Risk Assessment.</li> <li>Extension of schedule to reflect the additional time needed to incorporate results from the Soil Risk Assessment after agencies'approval. Additional time was also added to allow Tribes, stakeholders, and agencies more time to review the report over end of year holidays.</li> <li>Extension of schedule to reflect a revision of the Soil RFI/RIVol. 3 report and additional review as well as RTC of the revised report.</li> <li>Extension of schedule reflects the actual timing of comment resolution as well as the time needed to revise the Soil RFI/R Ireport based on actual comment resolution.</li> <li>Extension of schedule reflects an extended review/comment period for the RTC and revised sections of the report and finalize the Soil RFI/RI report.</li> <li>Time extension reflects additional time needed to revise the RFI/RI Volume 3 report.</li> </ul>	

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Soil Risk Assessment Addendum (Report Preparation, Review/ comment, RTCs, Final, Approval) (Lines 1002-1015)	<ul> <li>FF 5/11/2023</li> <li>FF 6/13/2023 (Rev. 49)</li> <li>FF 9/4/2023 (Rev. 50)</li> <li>FF 1/15/2024 (Rev. 51)</li> </ul>	Cascading change from Soil NTCRA implementation.
Soil Corrective Measure Study/Feasibility Study (Draft CMS/FS, RTC, Final CMS/FS, Agencies Approval) (Lines 1399-1419)  DTSC CEQA Evaluation (placeholder only) (Line 1420)	<ul> <li>FF 11/24/2022 (Rev. 44, 45)</li> <li>FF 5/12/2023 (Rev. 46, 47)</li> <li>FF 10/4/2024 (Rev. 48)</li> <li>FF 10/30/2024 (Rev. 49)</li> <li>FF 12/27/2024 (Rev. 50)</li> <li>FF 6/20/2025 (Rev. 51)</li> <li>To be determined after CMS/FS is complete.</li> </ul>	<ul> <li>Cascading changes from Soil RFI/RI report.</li> <li>Schedule reflects the incorporation of conclusions from the Soil Risk Assessment Addendum and the NTCRA Completion Report into the Draft CMS/FS.</li> <li>Cascading change from Soil RFI/RI and Soil NTCRA implementation.</li> </ul>
Statement of Basis including Public Reviewto Remedy Adoption (Lines 1429-1435)	<ul> <li>FF 6/28/2023 (Rev. 44, 45)</li> <li>FF 10/31/2023 (Rev. 46, 47)</li> <li>FF 3/25/2025 (Rev. 48)</li> <li>FF 4/22/2025 (Rev. 49)</li> <li>FF 6/17/2025 (Rev. 50)</li> <li>FF 12/9/2025 (Rev. 51)</li> </ul>	Cascading changes from Soil RFI/RI and CMS/FS reports.
Proposed Plan/Record of Decision (Lines 1448-1457)	<ul> <li>FF 9/21/2023 (Rev. 44, 45)</li> <li>FF 3/8/2024 (Rev. 46, 47)</li> <li>FF 8/1/2025 (Rev. 48)</li> <li>FF 8/27/2025 (Rev. 49)</li> <li>FF 10/24/2025 (Rev. 50)</li> <li>FF 4/17/2026 (Rev. 51)</li> </ul>	Cascading changes from Soil RFI/RI and CMS/FS reports.
Soil Non-Time Critical Removal Action (NTCRA)		
Soil Non-Time Critical Removal Action (NTCRA Work Plan through Acceptance of Completion Report) (Lines 1051-1085)	<ul> <li>FF 6/19/2023 (Rev. 48)</li> <li>FF 7/13/2023 (Rev. 49)</li> <li>FF 10/20/2023 (Rev. 50)</li> <li>FF 3/1/2024 (Rev. 51)</li> </ul>	<ul> <li>Schedule was updated to reflect extended duration for the RTC process associated with the NTCRA Work Plan.</li> <li>Extension of the schedule reflects the additional time needed to a) step outside of the Target Action Areas (TAAs) due to the presence of discolored materials and/or concentrations higher than the Remedial Action Goals (RAGs) and b) manage site conditions post August 2022 storm events.</li> </ul>