# Handout 10B Schedule Highlights Summary of Key Schedule Changes

Consultative Work Group Meeting May 9, 2023

#### **Schedule Highlights**

Text in "red font" represents updates from last CWG (11/9/22)

#### **Phase 1 Groundwater Remedy Construction**

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 Groundwater Remedy Construction**

TCS Recirculation Loop\*, Freshwater Injection Well (FW-02) and Associated Arsenic Monitoring Wells, Pipelines (Inside/Outside of TCS)\*

- Phase 2A Construction and Startup 3/7/22 to 4/30/24
  - Mobilization 2/14 to 3/7/22
  - Pilot Borehole/Well Installation/Well Buildout 3/8/22 to 10/24/23
    - Assumes a decision is made on FW-02 and associated arsenic MWs in July 2023
  - Pipeline Installation 4/4/22 to 4/8/24
  - Site Electrical/Instrumentation & Control 12/20/22 to 10/24/23
  - System Integration/Functional Testing 3/21/23 to 4/30/24
- Phase 2A Startup Forecast 4/30/2024

Current forecast includes a 3-month pause in Phase 2A heavy construction. The pause is driven by delayed receipt of vault panel components. Note that Phase 2A schedule is independent of Phase 2B.

<sup>\*</sup> The TCS Recirculation Loop consists of 2 injection wells in TCS, 2 extraction wells at the Transwestern Bench, and 4 extraction wells in the East Ravine (along historic Route 66).

#### **Phase 2B Groundwater Remedy Construction**

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 December 2023
- Mobilization Mid-December 2023 to mid-January 2024
- California Remedy Facilities January 2024 to November 2025
- Arizona Remedy Facilities January to June 2024
- System Integration/Functional Testing November 2025 to May 2026
- Phase 2B Startup Forecast May 2026

<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.

# Five-Year Review of Groundwater Remedy

- First Five-Year Review
  - Public Notice/Factsheet May 1, 2023
  - Request for Interview May 1 to May 31, 2023
  - Interview June 1 to July 31, 2023
  - Prepare Five-Year Review Report May 1 to December 31, 2023
  - Notice of Report Availability December 31, 2023

### Proposed Phase 2B Design Modification

- PG&E submitted proposal to DTSC/DOI 12/2/22
- DTSC forward to CWG/TWG 12/22/22
- FMIT provided comments 3/7/22
- Tribal consultation 3/20 to 4/20/22
- Quechan Indian Tribe provided concurrence with FMIT comments – 4/25/22
- DTSC provided comments 5/3/23
- Site visit May 11, 2023

### 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: 10/3/22 1/31/23
  - Agencies Review: 10/3/22 3/28/23
  - PG&E Review Comments/Prepare Responses
  - Comment Resolution June-July 2023
- Final Report September 2023
- Agencies Review/Approve October 2023

#### **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 December 2023
- Soil NTCRA Completion Report (incorporate results from the Soil Risk Assessment Addendum) – Forecast September 2024
- DOI review/accept report Forecast October 2024

## Soil Risk Assessment (RA) Addendum

- A Soil Risk Assessment Addendum will be prepared after the implementation of the Soil NTCRA
  - Prepare/submit RA Addendum: February 2024
  - Tribes/Stakeholders review/comment: February March 2024
  - Agencies review/comment: February March 2024
  - Compile/prepare RTCs: April June 2024
  - Review RTCs/comment resolution: July 2024
  - Finalize/submit RA Addendum: July September 2024
  - Anticipate Agencies' Approval: September 2024
- 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: December 2025
  - Tribes/Stakeholders review/comment: 60 calendar days
  - Agencies review/comment: 75 calendar days
- Prepare RTCs/Comment Resolution: February-June 2026
- Finalize/submit final CMS/FS: June September 2026
- Anticipate Agencies' Approval: October 2026

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

- DTSC's Statement of Basis/Adoption of Remedy – Forecast Q2 2027
  - CEQA evaluation of the selected remedy will be conducted after Final CMS/FS

 DOI's Record of Decision – Forecast Q3 2027

### **Summary of Schedule Changes**

#### Handout 10B

#### Summary of Key Schedule Changes since August 15, 2007 (Rev. 52)

#### Yellow highlights are changes since November 9, 2022 CWG

Activities	Forecast Schedule Deviation	Key Reasons
<b>Groundwater Reme</b>	dy Construction	
Phase 2A Construction and Startup (Lines 1796-1811)  Phase 2B Construction and	FF for completion of construction  • 4/27/2023 (Rev. 48, 49, 50)  • 5/30/2023 (Rev. 51)  • 4/24/2024 (Rev. 52)  FF for completion of construction	<ul> <li>Time extension reflects adjustments made from remedy construction sequencing and implementation details.</li> <li>Current forecast includes a 3-month pause of Phase 2A heavy construction due to delayed receipt of vault panel components.</li> </ul>
Startup (Lines 1813-1836)	• 5/1/2026 (Rev. 52)	
Soil RCRA Facility I (CMS/FS)	Investigation/Remedial Investiga	tion (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 2/7/2020 (Rev. 39 and 40)</li> <li>FF 6/9/2020 (Rev. 41)</li> <li>FF 9/7/2020 (Rev. 42, 43)</li> <li>FF 11/3/2021 (Rev. 44, 45)</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</li> </ul>

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	<ul> <li>FF 5/6/2022 (Rev. 48)</li> <li>FF 10/31/2022 (Rev. 50)</li> <li>FF 5/26/2023 (Rev. 51)</li> <li>FF 10/13/2023 (Rev. 52)</li> </ul>	<ul> <li>Time extension reflects additional time needed to revise the RFI/RI Volume 3 report.</li> <li>Time extension reflects an additional one month requested by stakeholders to review and provide comments, and the anticipated duration to prepare responses to comments and resolve responses.</li> </ul>
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> <li>FF 9/25/2024 (Rev. 52)</li> </ul>	Cascading change from Soil NTCRA implementation.
Soil Corrective Measure Study/Feasibility Study (Draft CMS/FS, RTC, Final CMS/FS, Agencies Approval) (Lines 1399-1420)	<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>FF 10/19/2026 (Rev. 52)</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 NTCRA implementation.</li> </ul>
DTSC CEQA Evaluation (placeholder only) (Line 142 <mark>1</mark> )	To be determined after CMS/FS is complete.	
Statement of Basis including Public Reviewto Remedy Adoption (Lines 1430-1436)	<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> <li>FF 4/7/2027 (Rev. 52)</li> </ul>	Cascading changes from Soil RFI/RI and CMS/FS reports.
Proposed Plan/Record of Decision (Lines 1449-1458)	<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> <li>FF 8/18/2027 (Rev. 52)</li> </ul>	Cascading changes from Soil RFI/RI and CMS/FS reports.

Soil Non-Time Critical			
Removal Action			
(NTCRA Work Plan			
through Acceptance of			
Completion Report)			
(Lines 1051-108 <mark>6</mark> )			

- FF 6/19/2023 (Rev. 48)
- FF 7/13/2023 (Rev. 49)
- FF 10/20/2023 (Rev. 50)
- FF 3/1/2024 (Rev. 51)
- FF 10/7/2024 (Rev. 52)

- Schedule was updated to reflect extended duration for the RTC process associated with the NTCRA Work Plan.
- 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.