Handout 10B Schedule Highlights Summary of Key Schedule Changes

Consultative Work Group Meeting April 16, 2014

Schedule Highlights

Groundwater Remedy Design

Intermediate (60%) Design

Comments resolution meetings with Tribes/Stakeholders

- ✓ September 9/5 (web conf.), 9/17-18 (face-to-face)
- ✓ October 10/4 (web conf.), 10/16-17 (face-to-face)
- ✓ November 11/5 (web conf.), 11/19-20 (face-to-face)
- ✓ December 12/12 (web conf.), 12/17-18 (face-to-face)
- ✓ January 1/23 (face-to-face)
- ✓ February 2/11 (face-to-face)

✓ PG&E sent RTCs to Agencies/Tribes/Stakeholders – 12/31

✓ DTSC/DOI direction on remaining 60% issues - 4/4

✓ PG&E sends Final RTCs – 4/18/14

Pre-final (90%) Design

✓ PG&E submits design – 9/8/14 (target)

Groundwater Remedy Design

- Implementation of Alternative Fresh Water Source Evaluation
 - ✓ Field Implementation 10/2/13 through 2/14/14
 - ✓ Data Call #1 to discuss exploratory data 11/4/13
 - ✓ Data Call #2 to discuss field update 1/29/14
 - ✓ Data Call #3 to discuss data summary/path forward 2/28/14
 - ✓ Discuss freshwater pipeline alignment in AZ 3/19/14 TWG
 - ✓ Summary Tech Memo 4/2/14
 - ✓ DTSC/DOI provide direction on freshwater source 4/4/14
 - Continuation of FWIP Target completion end of June (schedule will be confirmed after receipt of information re: drill rig availability)

Soil Activities

- Soil RFI/RI work plan
 - ✓ PG&E submitted final work plan 1/14/13
 - ✓ CEQA review 11/12/12 to 11/20/14
 - ✓ Agencies approve Soil Work Plan anticipated 11/21/14
- Work Plan Implementation
 - ✓ Field Implementation/Data Analysis November 2014 through November 2015
- Reporting
 - ✓ RFI/RI Volume 3 Target start November 2015
 - ✓ Soil Risk Assessment Target start October 2016

Addendum to RFI/RI Volume 1

- Addendum to RFI/RI Volume 1 Report
 - ✓ PG&E submitted draft report 3/26/13
 - ✓ CWG/TWG/Tribes review 4/9 to 9/9/13
 - ✓ Agencies review 4/9 to 9/10/13
 - ✓ RTCs/Comment Resolution 10/16/13 to 4/18/14
 ✓ RTCs table to Tribes and Stakeholders 1/13/14
 - ✓ Comment resolution meeting 3/19/14
 - ✓ Revised RTCs table to Tribes and Stakeholders 4/2/14
 - ✓ Submit final report target 4/25/14
 - ✓ Agencies approval anticipated early May 2014

Risk Assessment Work Plan (RAWP) Addendum II

- Submitted RAWP Addendum II TM: 1/25/13
 - ✓ CWG/TWG/Tribes/Agencies review TMs: 1/30 4/30/13
 - ✓ Prepare/submit RTCs: 5/1 6/12/13
 - ✓ DTSC send RTCs to Tribes 6/24/13
 - Scoping meetings to finalize scope for RAWP Addendum II: 9/19-20
- Submit Draft RAWP Addendum II: Target May 2014
- Submit Final RAWP Addendum II: Target November 2014
 ✓ Agencies approval anticipated December 2014

Summary of Key Schedule Changes

Handout 10B

Summary of Key Schedule Changes since August 15, 2007 (Rev. 22)

April 16, 2014 changes highlighted in Yellow – changes are from February 12, 2014

Activities	Forecast Schedule Deviation	Key Reasons
Groundwater		
Intermediate (60%) Design (through Comment Resolution) (Lines 1451-1478)	 FF 3/30/2011 (Rev. 11) FF 4/9/2011 (Rev. 12) FF 6/14/2012 (Rev. 13) FF 8/9/2012 (Rev. 14) FF 12/11/12 (Rev. 15) FF 06/28/2013 (Rev. 16) FF 10/1/2013 (Rev. 17) FF 12/18/2013 (Rev. 19) FF 1/10/2014 (Rev. 20) FF 3/14/2014 (Rev. 21) AF 4/4/2014 (Rev. 22) 	 Cascading extension of schedule from Preliminary (30%) Design. Additional time to incorporate comments and prepare 60% Design. Extend duration for CWG/TWG review from 30 to 60 calendar days. Extend duration of DTSC/DOI review from 45 to 75 calendar days. Adjusted schedule to allow for additional time to evaluate freshwater options that do not require arsenic treatment. Schedule reflected DTSC's directive in the 12/31/2012 letter. Updated the RTC process per the 10/16/12 meeting. Extend duration to reflect: a) a request for a 45-day extension for review and comment on the 60% design, b) additional time for meetings to discuss response to comments from 1 day to 1 week, and c) additional step for PG&E to finalize and resubmit RTCs. Additional time required to resolve comments.
Implementation of Alternative Freshwater Source Evaluation including CEQA Review (Lines 1480-1518)	 FF 6/7/2013 (Rev. 17) FF 8/7/2013 (Rev. 18) FF 11/12/2013 (Rev. 19) FF 12/20/2013 (Rev. 20) FF 2/14/2014 (Rev. 21) FF 6/30/2014 (Rev. 22) 	 Schedule reflected additional time for consultation, response to comments, and finalizing the Implementation Plan. Extend duration to reflect timing for responding to comments, finalizing the Final Implementation Plan, State CEQA review, and Agencies approval. Schedule reflected additional time for Tribe's review and comment as well as agencies evaluation of Final Work Plan, RTCs and CEQA compliance. Extension of field schedule due to time required to repair drilling equipment and work scheduling over end-of-year holidays. Additional time required for continuation of field work.
Pre-Final (90%)/Final (100%) Design (through Approvals) (Lines 1519-1530)	 FF 9/24/2012 (Rev. 11) FF 10/2/2012 (Rev. 12) FF 11/30/2012 (Rev. 13) FF 1/29/2013 (Rev. 14) FF 7/2/2013 (Rev. 15) FF 1/20/2014 (Rev. 16) 	 Cascading extension of schedule from Preliminary (30%) Design. Extend duration for CWG/TWG review from 30 to 60 calendar days. Extend duration for Tribal Consultation from 30 to 60 calendar days. Extend duration of DTSC/DOI review from 45 to 75 calendar days. Cascading changes from Intermediate (60%) Design and 60% Design Addendum.

Construction/Remedial Action Work Plan (through Approvals) (Lines 1531-1543)	 FF 5/22/2014 (Rev. 17) FF 9/8/2014 (Rev. 18) FF 10/7/2014 (Rev. 19) FF 10/29/2014 (Rev. 20) FF 12/31/2014 (Rev. 21) FF 3/26/2015 (Rev. 22) FF 9/24/2012 (Rev. 11) FF 10/2/2012 (Rev. 12) FF 11/30/2012 (Rev. 12) FF 11/30/2012 (Rev. 13) FF 1/29/2013 (Rev. 14) FF 7/2/2013 (Rev. 15) FF 1/20/2014 (Rev. 16) FF 5/22/2014 (Rev. 17) FF 9/8/2014 (Rev. 18) FF 10/7/2014 (Rev. 19) FF 10/29/2014 (Rev. 20) FF 12/31/2014 (Rev. 21) FF 3/26/2015 (Rev. 22) 	 Cascading changes from the Freshwater Source Evaluation and Comment Resolution schedule. Extension of schedule reflected a) the additional time required to complete resolution of 60% comments and b) the added time anticipated for resolution of 90% (from 1 month to 3 months). Cascading extension of schedule from Preliminary (30%) Design. Extend duration for CWG/TWG review from 30 to 60 calendar days. Extend duration for Tribal Consultation from 30 to 60 calendar days. Extend duration of DTSC/DOI review from 45 to 75 calendar days. Cascading changes from Intermediate (60%) Design and 60% Design Addendum. Cascading changes from the Freshwater Source Evaluation and Comment Resolution schedule. Cascading changes from Pre-Final (90%) Design. Addition of CEQA review of final design step.
Right of Ways/Easements/ Landowner Agreements/ Other Approvals/ Compliance/Community Outreach (Lines 1544-1560)	 FF 12/28/2012 (Rev. 11) FF 1/7/2013 (Rev. 12) FF 2/27/2013 (Rev. 12) FF 2/27/2013 (Rev. 13) FF 4/15/2013 (Rev. 13) FF 9/13/2013 (Rev. 14) FF 9/13/2013 (Rev. 15) FF 2/21/2014 (Rev. 15) FF 6/23/2014 (Rev. 16) FF 6/23/2014 (Rev. 17) FF 10/10/2014 (Rev. 18) FF 11/10/2014 (Rev. 19) FF 12/1/2014 (Rev. 20) FF 2/2/2015 (Rev. 21) FF 4/27/2015 (Rev. 22) 	 Cascading extension of schedule from Preliminary (30%) Design. Cascading extension of schedule from Intermediate (60%) Design. Added details on community outreach activities - State/Federal. Cascading changes from Intermediate (60%) Design and 60% Design Addendum. Cascading changes from the Freshwater Source Evaluation and Comment Resolution schedule. Cascading changes from Pre-Final (90%) Design.
Construction (Lines 1561-1576)	• 11 4/21/2013 (Rev. 12) FF for completion of construction • 6/18/2014 (Rev. 11) • 6/26/2014 (Rev. 12) • 8/18/2014 (Rev. 12) • 8/18/2014 (Rev. 13) • 9/29/2014 (Rev. 13) • 9/29/2014 (Rev. 14) • 2/26/2015 (Rev. 15) • 9/17/2015 (Rev. 16) • 12/4/2015 (Rev. 17)	 Cascading extension of schedule from Preliminary (30%) Design. Cascading extension of schedule from Intermediate (60%) Design Addendum. Added high level details on construction activities at 60% design stage. Cascading changes from Intermediate (60%) Design and 60% Design Addendum. Cascading changes from the Freshwater Source Evaluation and Comment Resolution schedule.

	• 9/16/2016 (Rev. 18)	Cascading changes from Pre-Final (90%) Design.
	• 10/17/2016 (Rev. 19)	
	• 11/8/2016 (Rev. 20)	
	 1/10/2017 (Rev. 21) 	
	• 4/5/2017 (Rev. 22)	
Start up	FF for completion of startup	. Case ding subargion of each dule from the charge items
Start-up	1 I	• Cascading extension of schedule from the above items.
(Lines 1582-1587)	• 12/14/2015 (Rev. 14)	Cascading changes from Intermediate (60%) Design and 60% Design
	• 5/13/2016 (Rev. 15)	Addendum.
	• 12/2/2016 (Rev. 16)	Cascading changes from the Freshwater Source Evaluation schedule.
	• 2/20/2017 (Rev. 17)	Cascading changes from Pre-Final (90%) Design.
	• 11/23/2017 (Rev. 18)	
	• 1/2/2018 (Rev. 19)	
	• 1/24/2018 (Rev. 20)	
	• 3/28/2018 (Rev. 21)	
	• 6/21/2018 (Rev. 22)	
Soil		
PEL/PL Volume 1 Addendum	• EE 11 /12 /12 (Box 19)	• Consider a changes to extensions of 60% design commont neried
RFI/RI Volume 1 Addendum	• FF 11/12/13 (Rev. 18)	Cascading changes to extensions of 60% design comment period.
(Lines 287-307)	• FF 1/14/14 (Rev. 19)	Additional time for response to comments, review of comments, and
	• FF 1/23/14 (Rev. 20)	comment resolution.
	• FF 4/11/14 (Rev. 21)	
	• FF 5/9/14 (Rev. 22)	
Soil RFI/RI Work Plan (Draft,	• Extend FF by 1.5 mos.	• 1 month due to DQO discussion and past data evaluation.
Final, and Work Plan	• Extend FF by 2 weeks	• 0.5 month due to incorporation of perimeter sampling walk/verification.
Approvals including CEQA	• Submitted RTCs on 5/5/08	Additional time for agency review of Part B Work Plan.
review)	• Submitted letter on Part B	• DTSC completed review of Part B Phase 1 proposal (7/2/09), issued
(Lines 824-893)	phasing on 7/17/08. In agencies	request letter to PG&E.
(Liftes 024-095)	review (Rev. 4)	• PG&E responded to DTSC's 7/2/09 letter (8/14/09).
	• Submitted details on approach to	• PG&E received DTSC's final direction on Part B (10/5/09), to resume Part
	Part B Phase 1 on $9/30/08$. In	B activities in February 2010.
	agencies review (Rev. 5). Part B is	• Added time for agency review and direct on conflicting comments on Draft
	on hold until agencies complete	Part B Work Plan.
	this review (Rev. 6)	• Adjusted schedule to reflect State of CA furlough ending 6/1/2010.
	• Extend FF to 12/1/2011 (Rev. 7)	 Align the start of Section 106 Consultation with the start of stakeholders/
	• Reduce FF to 1/19/2011 (Rev. 8)	agencies review of Final Part B Work Plan.
	• Extend FF to 5/25/2011 (Rev. 9)	 Added time for preparation/submittal/concurrence with Draft DQO TM.
	• Extend FF to 7/28/2011 (Rev. 10)	 Added time for preparation/submittal of Draft DQO TM.
	• FF 8/31/2011 (Rev. 11)	 Adjusted time for revision of Draft Part B DQO TM, combination of Part A

	 FF 12/6/2011 (Rev. 12) FF 3/1/2012 (Rev. 13) FF 5/11/2012 (Rev. 14) FF 9/6/2012 (Rev. 15) FF 10/31/2012 (Rev. 16) FF 9/13/2013 (Rev. 17) FF 1/24/14 (Rev. 18) FF 8/22/2014 (Rev.20) FF 11/21/2014 (Rev. 22) 	 and Part B into one Work Plan, and reflection of PA consultation (55 calendar days). Adjusted schedule to reflect additional time for Tribal consultation (total of 55 calendar days), followed by SHPO consultation (assume 30 calendar days). Adjusted schedule to reflect the comment resolution period, including time for site visits requested by DTSC and the Tribes. Schedule extension reflected additional time for comment resolution. Schedule extension also reflected additional time for revising work plan to incorporate responses to comments. Additional two weeks for CWG/TWG/Tribes to review responses to comments. TWG meeting to discuss responses to comments. Added approx. 4 weeks for comment resolution. The current anticipated approval date for the Final Soil RFI/RI Work Plan is an estimate and is pending CEQA review. Adjusted schedule to reflect additional time required to respond to DTSC's comments on the September 2012 Work Plan and to revise the Work Plan. Additional time required for Tribal discussion on mitigation measures (Soil EIR). Additional time required for survey and reporting of historical/ archaeological sites in the Soil EIR Project Area. Additional time to incorporate the survey information into the Soil EIR. Schedule reflected additional time for Soil EIR. Additional time required for CEQA review.
Work Plan Implementation/ Data Analysis	 FF 8/16/2013 (Rev. 15) FF 10/24/2013 (Rev. 16) 	• Adjusted schedule to reflect current anticipated approval date and scope of the Final Soil RFI/RI Work Plan.
Data Allarysis		the r mar John Kr l/ Kr Work r lan.
(Lines 894 – 902)	• FF 9/8/2014 (Rev. 17)	 Cascading changes from Soil Work Plan approval and Soil EIR.
2	 FF 9/8/2014 (Rev. 17) FF 1/19/2015 (Rev. 18) 	
2	 FF 9/8/2014 (Rev. 17) FF 1/19/2015 (Rev. 18) FF 8/17/2015 (Rev.20) 	
2	 FF 9/8/2014 (Rev. 17) FF 1/19/2015 (Rev. 18) 	Cascading changes from Soil Work Plan approval and Soil EIR.
(Lines 894 – 902)	 FF 9/8/2014 (Rev. 17) FF 1/19/2015 (Rev. 18) FF 8/17/2015 (Rev.20) FF 11/16/2015 (Rev. 22) 	

(Lines 903 - 918)	• FF 12/29/2015 (Rev. 18)	
	• FF 7/26/2016 (Rev.20)	
	• FF 10/25/2016 (Rev. 22)	
Risk Assessment Work Plan	• FF 1/24/2014 (Rev. 16)	Adjusted schedule to reflect the additional time required for
Addendum II (through	• FF 3/12/2014 (Rev. 17)	review/comment on the proposed changes to the RAWP and the
Approvals)	• FF 5/11/2014 (Rev. 18)	Arrowweed tech memo.
	• FF 12/7/2014 (Rev. 20)	Cascading changes from Soil Work Plan approval and Soil EIR.
(Lines 1130-1154)	11 12,7,7 2011 (1.0.1.20)	
Risk Assessment (through	• FF 7/22/2015 (Rev. 16)	Adjusted schedule to reflect current anticipated schedule for approval of
Approvals)	• FF 6/7/2016 (Rev. 17)	Final Soil RFI/RI Work Plan, completion of Work Plan
	• FF 10/18/2016 (Rev. 18)	Implementation/Data Analysis, approval of RFI/RI Vol. 3 Reporting, and
(Lines 1172 – 1187)	• FF 5/16/2017 (Rev. 20)	approval of the Risk Assessment Work Plan Addendum II.
	• FF 8/15/2017 (Rev. 22)	Cascading changes from Soil Work Plan approval and Soil EIR.
CMS/FS Report (through	FF for approval of CMS/FS	• Approx. 2 months due to cascading delay from Part A Phase 1 workplan/
Approvals)	• 2/21/12 (Rev. 2)	approval/permitting.
(Lines 1249 - 1265)	• 7/3/2012 (Rev. 3)	• 1 month from adding a link between tribal review of CMS/FS and PG&E
(Lines 1249 - 1203)	• 8/21/2012 (Rev. 5)	response to comments.
	• 2/15/2013 (Rev. 6)	Cascading delay from Part A approval.
	• 12/4/2013 (Rev. 7)	Cascading delay from Part A Phase 1 data gaps evaluation.
	• 5/16/2014 (Rev. 8)	Revise the Soil CMS/FS steps to mirror the Groundwater CMS/FS steps
	• 5/14/2014 (Rev. 9)	• E.g., discussion draft, draft, resolution to comments, final.
	• 5/23/2014 (Rev. 10)	• Use the duration of the Groundwater CMS/FS steps as placeholders.
	• 5/21/2014 (Rev. 11)	 Keep the sequential order of RFI/RI and Risk before CMS/FS.
	• 8/27/2014 (Rev. 12)	Reflect revised Part A and B schedule.
	• 11/19/2014 (Rev. 13)	 Added time for "Prepare Response to Comments" before CMS/FS
	• 1/29/2015 (Rev. 14)	comments resolution.
	• 5/27/2015 (Rev. 15)	• Added a hard link between the completion of the risk assessment and the
	• 6/9/2016 (Rev. 16)	start of the CMS/FS.
	• 4/26/2017 (Rev. 17)	Adjusted schedule to reflect current anticipated schedule for approval of
	• 9/6/2017 (Rev. 18)	Final Soil RFI/RI Work Plan, completion of Work Plan
	• 4/4/2018 (Rev. 20)	Implementation/Data Analysis, approval of RFI/RI Vol. 3 Reporting, and
	• 6/30/2018 (Rev. 22)	approval of the Risk Assessment Work Plan Addendum II.
		Cascading changes from Soil Work Plan approval and Soil EIR.
Statement of Basis (Lines	Extend NOD filing to:	Cascading delay from CMS/FS Soil
1274 – 1280)	• FF 12/7/2012 (Rev. 3)	• Addition of links from a) Supplemental EIR public comment to Statement
Public Notice/Supplemental	• FF 1/25/2013 (Rev. 5)	of Basis public comment and b) Supplemental EIR certification to DTSC
EIR (Lines 1410 – 1422)	• FF 7/22/2013 (Rev. 6)	approval of Soil Remedy.
	• FF 5/8/2014 (Rev. 7)	Cascading delay from CMS/FS Soil.

	 FF 11/20/2014 (Rev. 8) FF 11/16/2014 (Rev. 9) FF 10/27/2014 (Rev. 10) FF 10/2/2014 (Rev. 11) FF 1/8/2015 (Rev. 12) FF 4/2/2015 (Rev. 12) FF 7/13/2015 (Rev. 13) FF 7/13/2015 (Rev. 14) FF 11/8/2015 (Rev. 15) FF 10/21/2016 (Rev. 15) FF 9/26/2017 (Rev. 17) FF 2/6/2018 (Rev. 18) FF 8/16/2018 (Rev. 20) FF 11/16/2018 (Rev. 22) 	 Adjusted schedule to reflect current anticipated schedule for approval of Final Soil RFI/RI Work Plan, completion of Work Plan Implementation/Data Analysis, approval of RFI/RI Vol. 3 Reporting, and approval of the Risk Assessment Work Plan Addendum II. Cascading changes from Soil Work Plan approval and Soil EIR.
Proposed Plan/ROD (Lines 1293 – 1303)	Extend ROD issuance to: • FF 9/6/2012 (Rev. 3) • FF 1/17/2013 (Rev. 4) • FF 3/7/2013 (Rev. 5) • FF 11/20/2013 (Rev. 6) • FF 9/8/2014 (Rev. 7) • FF 2/18/2015 (Rev. 7) • FF 2/18/2015 (Rev. 8) • FF 2/16/2015 (Rev. 9) • FF 2/25/2015 (Rev. 10) • FF 2/23/2015 (Rev. 11) • FF 6/1/2015 (Rev. 12) • FF 8/24/2015 (Rev. 13) • FF 11/3/2015 (Rev. 14) • FF 2/29/2016 (Rev. 15) • FF 3/14/2017 (Rev. 16) • FF 1/29/2018 (Rev. 17) • FF 6/11/2018 (Rev. 18) • FF 1/7/2019 (Rev. 20) • FF 4/4/2019 (Rev. 22)	 Cascading delay from CMS/FS Soil. Increased the duration of DOI Approval Process for ROD from 60 to 90edays. Added a hard link (similar to the Groundwater ROD) between approval of the CMS/FS and the start of the Proposed Plan. Adjusted schedule to reflect current anticipated schedule for approval of Final Soil RFI/RI Work Plan, completion of Work Plan Implementation/Data Analysis, approval of RFI/RI Vol. 3 Reporting, and approval of the Risk Assessment Work Plan Addendum II. Cascading changes from Soil Work Plan approval and Soil EIR.