Item 1

LATE ADDITION

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION

MEETING OF SEPTEMBER 16-17, 2015
BARSTOW

ITEM 1 -- PUBLIC WORKSHOP ON DRAFT ORDER REQUIRING PG&E TO CLEANUP AND ABATE ITS DISCHARGES OF CHROMIUM TO GROUNDWATER IN THE HINKLEY AREA

Add the attached Prosecution Team Power Point slides and Explanation of Consensus Changes behind Bates page 1-121.

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Hinkley – Groundwater Remediation Program

Summary of Consensus Changes

Southern Monitoring Program Changes #1

Hinkley monitoring program applies best science and knowledge.

Review and analysis of data supported revisions to monitoring program for Southern Plume Area :

- Clarified objectives to **track** remediation effectiveness, plume and **protect** domestic wells
- Monitoring and reporting program updated to better meet objectives

Program-wide Monitoring Changes #2

Annual review of sampling data will determine required sampling frequencies (quarterly, semi-annually, annually, every other year) at monitoring wells

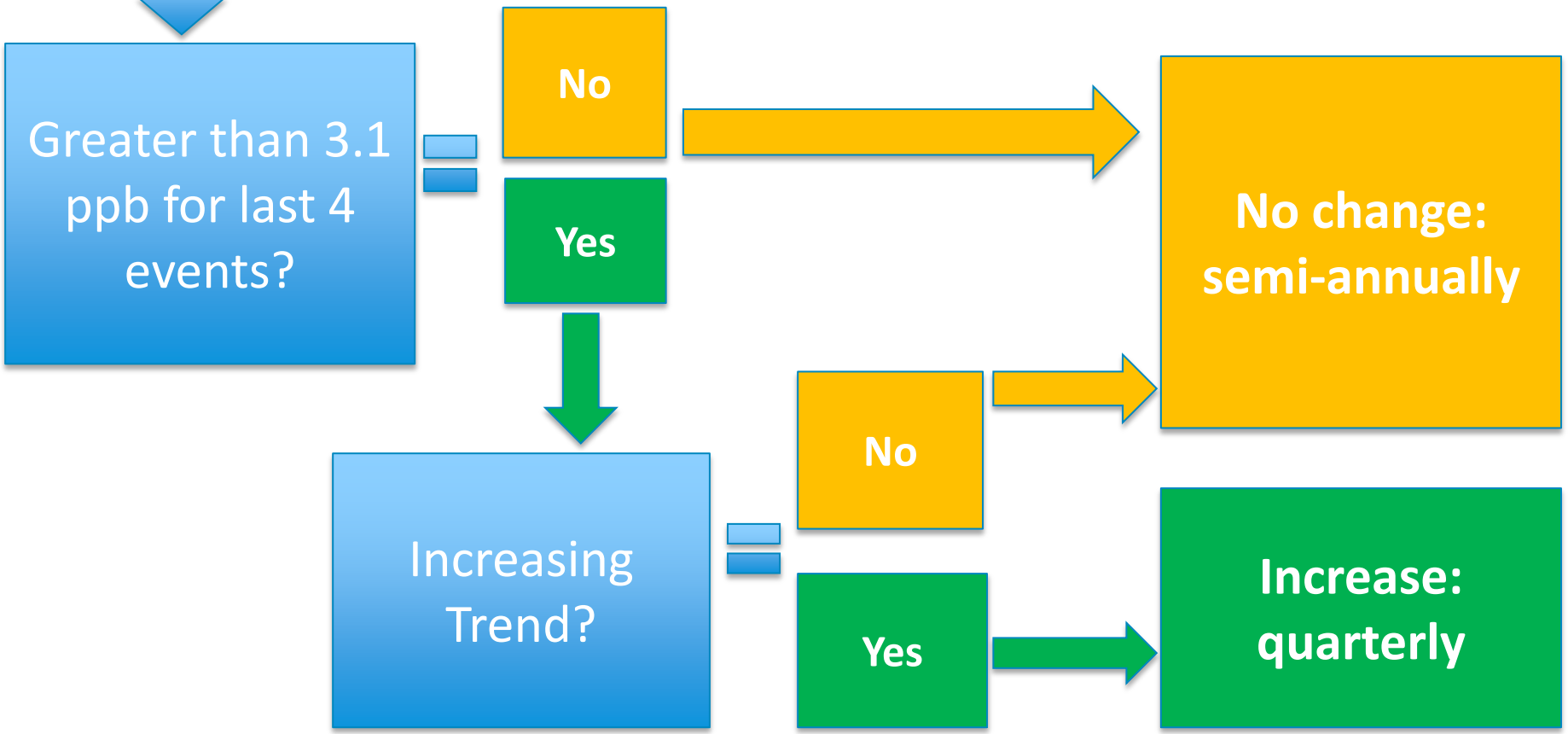
Sampling frequency may increase or decrease based on the following criteria (no monitoring wells to be abandoned):

- **Results over time consistently above or below:**
  - **Established background level (3.1 ppb)**
  - **MCL (10 ppb)**
- **Mann-Kendall trend analysis (Trending up, down, or no trend)**

Annual Monitoring Review (Example)

Well currently sampled semi-annually

Annual review to determine changes, if any, based on specified criteria for each area and type of well.



Prosecution Team Explanation of Consensus Changes
CAO R6V-2015-DRAFT

Sections and page numbers are from the Advisory Team's CAO issued September 1, 2015. Consensus changes are shown in *black italics* with deletions in ~~strikeout~~ and additions in underline text.

Change #	CAO Section, Page	Bates #	Explanation for Consensus Change
1	Finding 6, P. 2	1-7	Revised to update chromium concentrations.
2	Finding 7, P. 2	1-7	Revised for clarity.
3	Finding 8c, P. 3	1-8	Revised to update chromium concentrations, and reflect updated information on hot spots in northern area.
4	Finding 9, P. 3	1-8	Revised to update references to findings.
5	Finding 14, P. 4	1-9	Revised for clarity.
6	Finding 16, P. 5	1-10	Revised to describe peer review criticisms and limitations regarding the 2007 background study, and to acknowledge the USGS background study.
7	Finding 33, P. 9	1-14	Inserted phrase "when applicable" to acknowledge revisions to triggers for cleanup requirements for northern area (see change # 24). Deleted phrase "background values of 3.1 ppb Cr(VI) and 3.2 ppb Cr(T) in the upper aquifer" because order requirements VI. C 1 a) i and ii, for cleanup to background in western finger area were deleted and replaced by consensus change (see change # 21).
8	Finding 37 a) – c), P. 10-11	1-15, 1-16	Revised finding to reflect consensus on MRP.
9	Finding 39, P. 11	1-16	Revised to update chromium concentrations and domestic well numbers.
10	Finding 42, P. 12	1-17	Revised for clarity, and deleted reference to "affected area" (throughout CAO). Affected area designation and terminology is no longer needed

Change #	CAO Section, Page	Bates #	Explanation for Consensus Change
			because domestic well monitoring areas are set by existing remediation permits in southern plume area, and specific requirements for domestic wells in northern area per MRP section I.E.
11	Finding 43, P. 12	1-17	Deleted discussion of requirement to supply replacement water plans if domestic well reaches 8 ppb Cr(VI) to reflect change in orders VII. A and VII. A 2 a (see change # 25).
12	Deleted (former) Finding 43, P. 12	1-17	Deleted this finding defining affected area because term is no longer used in CAO.
13	Finding 44, P. 12-13	1-17, 1-18	Clarified definition of affected wells.
14	Order IV. B 1, P. 16	1-21	Requirement complete, therefore deleted.
15	Order V. A 2, P. 18	1-23	Revised to clarify that hydraulic capture metrics apply to this requirement.
16	Order V. B (deleted), P. 18	1-23	Deleted and replaced by Order VI. A and B and footnote 2 to define "continuously" (see changes 18 and 19).
17	Order V. B, and C 3, P. 18	1-23	Revised to make hydraulic capture metrics applicable to these requirements, not the 1,000 foot criterion.
18	Order VI. A, P. 20	1-25	Revised to define "continuously". Deleted requirement for Water Board approval for changes in operations (this requirement is now contained in order VI. B).
19	Order VI. B, P. 20	1-25	Described requirement to submit annual operating plans to set level of effort expected for corrective actions. Requires notification to Water Board for reductions in corrective actions of more than 10 percent compared to annual plans. Allows for flexibility to adaptively manage remediation while keeping Water Board informed of changes. Intent is to promote transparency and accountability in level of effort to reach cleanup goals in a timely manner.

Change #	CAO Section, Page	Bates #	Explanation for Consensus Change
20	Order VI. C, P. 20	1-25	Revised for accuracy.
21	Orders VI. C 1 a) i, ii, iii, & Table 1, P. 20-21	1-25, 1-26	Inserted revised requirements for western finger; deleted requirement to clean up to background levels by July 2016. Revisions were needed because no technical basis available to support specific cleanup date. Requirement to continue on-going remedial actions is retained, sets new trigger to require additional actions if monitoring wells in CAO Table 1 reach 10 ppb Cr(VI). Revisions require PG&E to submit a cleanup feasibility report following USGS preliminary results report expected in 2017. Previous orders i and ii are deleted and replaced by the above.
22	Order VI. C 1 c) i and ii, P. 22	1-27	Revised southern plume upper aquifer cleanup requirements. Timeframes were developed considering a range of factors, including but not limited to, uncertainty in the modeling results and the need for strong remediation progress.
23	Order VI. C 1 c) iv, P. 22	1-27	Inserted requirement for four-year report on cleanup status and effectiveness (as specified in CAO MRP). Acknowledges PG&E has ability to request an extension of deadlines, subject to Water Board approval.
24	Order VI. C 2 a) - c), P. 23	1-28	Revised northern plume area cleanup requirements to reflect current conditions. Cr(VI) levels at northern area MWs 196-S2 and 154-S1 in 2nd Quarter 2015 now below 10 ppb; MW 193-S3 shows decreases in concentrations. Revisions focus on domestic well protection as trigger for cleanup requirements, and set levels and increasing trend targets for monitoring wells 0.5 mile upgradient of domestic wells to define hotspots and trigger remediation plan. Recognizes USGS background study information may become available to better understand source of chromium in this area. Deleted previous hotspot remediation requirements due to decreases noted above.

Change #	CAO Section, Page	Bates #	Explanation for Consensus Change
25	Order VII. A, P. 24	1-29	Deleted reference to outdated term "affected area" (throughout CAO) and removed required for analysis if a domestic well has Cr(VI) concentrations within 20 percent of MCL. The 20 percent requirement is not needed because there already is an "increasing trend" analysis requirement for domestic wells, in line with the Water Board's regulatory authority. Increasing trend analysis will provide sufficient advance warning to submit replacement water plan as required by order VII. A 2.
26	Order VII. A 1 a) and b), P. 24-25	1-29, 1-30	Revised to reflect consensus on timing of providing bottled water. Revisions remove reference to affected area, and require bottled water within 10 days of lab results indicating affected well, rather than 2 days of a quarterly report for a quicker response.
27	Order VII. A 2 a) - c), P. 25-26	1-30, 1-31	Replaced term "permanent" with the more accurate term "long-term" throughout section. Replacement water not required "permanently", but as long as well is affected as defined in CAO.
28	General Provision XI, P. 28	1-33	Revised laboratory reporting limit from 0.1 to 0.2 ppb Cr(VI) for consistency with site-wide reporting requirements and Cr(VI) MCL adoption.