

Public Information Meeting

Hosted by staff of the Lahontan Water Board

Proposed Cleanup and Abatement Order

PG&E Hinkley Chromium Groundwater Cleanup



Lauri Kemper, PE
Assistant Executive Officer

Lisa Dernbach, PG, CHG, CEG
Senior Engineering Geologist

Anne Holden, PG
Engineering Geologist

February 26, 2015
Hinkley Senior and Community Center

Purpose of Meeting

- Outline requirements of proposed Cleanup and Abatement Order (CAO)
- Answer questions
- Take written comments
- Discuss next steps



Meeting Ground Rules

Ground Rules are designed to keep discussions on track, focus on the topic and use our time efficiently.

- Use common courtesy. Do not interrupt another speaker. Listen to each other and respect all views.
- Turn cell phones off. If you must take a call, do so outside of the meeting room.
- Give everyone the opportunity to participate. Time limits may be imposed where needed.

Separation of Functions

Advisory Team

Duties:

Procedures for public participation, evidence submittals, public meetings, hearings

May propose changes to CAO based on their review and public comments

Advises Water Board members on CAO during hearing – Water Board members are the “Deciders”

Executive Officer, Patty Kouyoumdjian

Legal Team:
State Water Board
Office of Chief Counsel

Technical Staff:
Doug Smith
Richard Booth

Prosecution Team

Duties:

Develops proposed CAO

Responds to comments

Submits evidence to support CAO requirements

Assistant Executive
Officer, Lauri Kemper

Legal Team:
State Water Board
Office of Enforcement

Technical Staff:
Lisa Dernbach
Anne Holden

Think “Supreme Court”

Water Board Members
(Panel of Judges)

Water Board’s Advisory Team
(Court Clerks)

Prosecution Team
(Plaintiffs)

PG&E
(Defendants)

Public
(Interested Persons)

Cleanup and Abatement Order

- January 21, 2015 –draft for public and PG&E comment released
- Consolidates all existing enforcement orders
- Requires:
 - Cleanup by specific dates
 - Continued plume delineation
 - Ongoing monitoring
 - Replacement water
 - Reporting and evaluation
 - Independent consultant for community

Cleanup Requirements

1. Ongoing cleanup of southern plume; sets dates for cleanup below 50 ppb (2021) and 10 ppb (2026)
2. Western finger cleanup to background by specific date (July 2016)
3. Lower aquifer cleanup to non-detectable concentrations (Dec 2018)
4. Requires plans to cleanup 'hot spots' in the northern area (18 or 36 months)

(see wall map for locations)

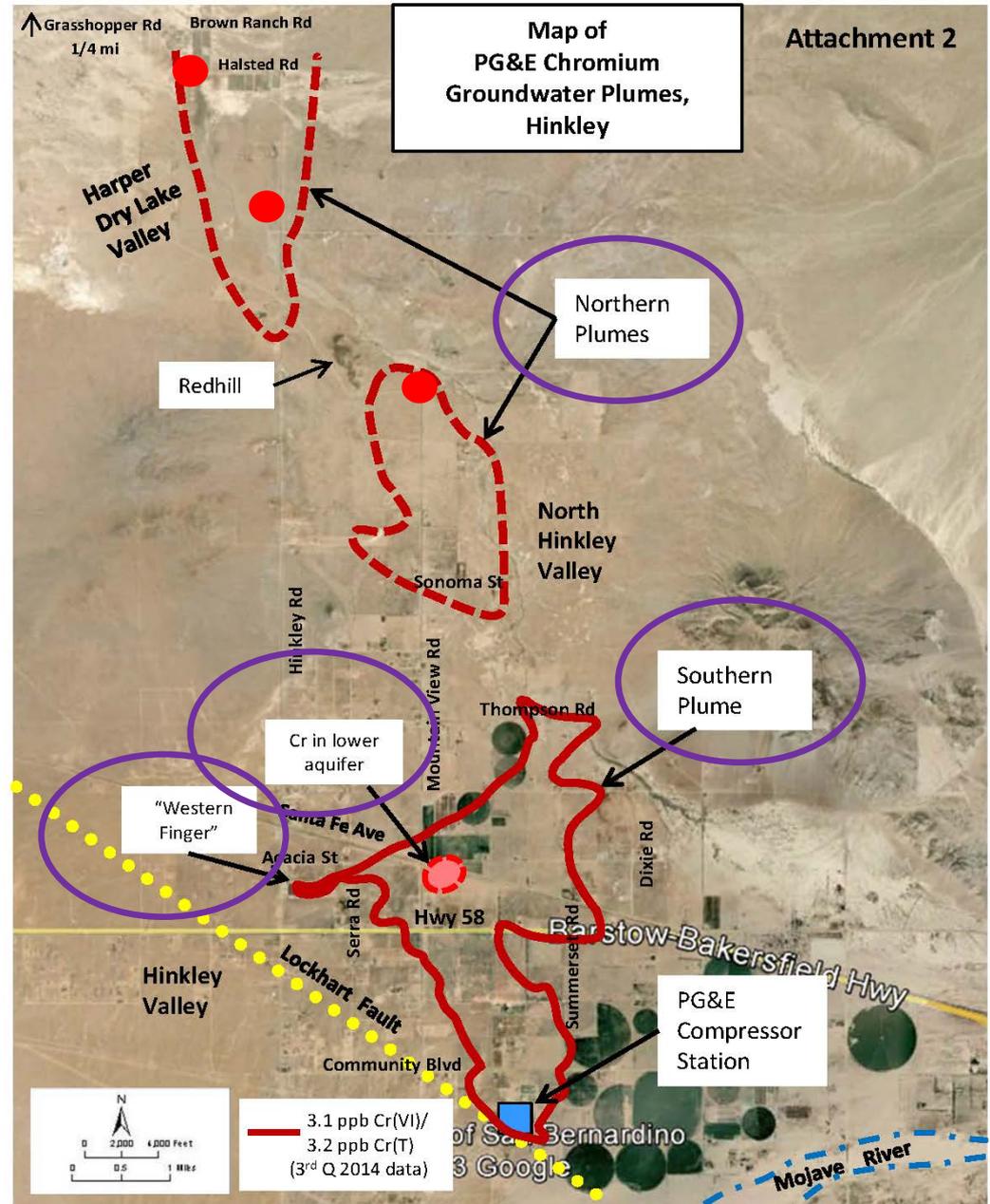
CAO Plume Locations

Northern area plumes
 ● Hotspots (Cr6 > 10 ppb)

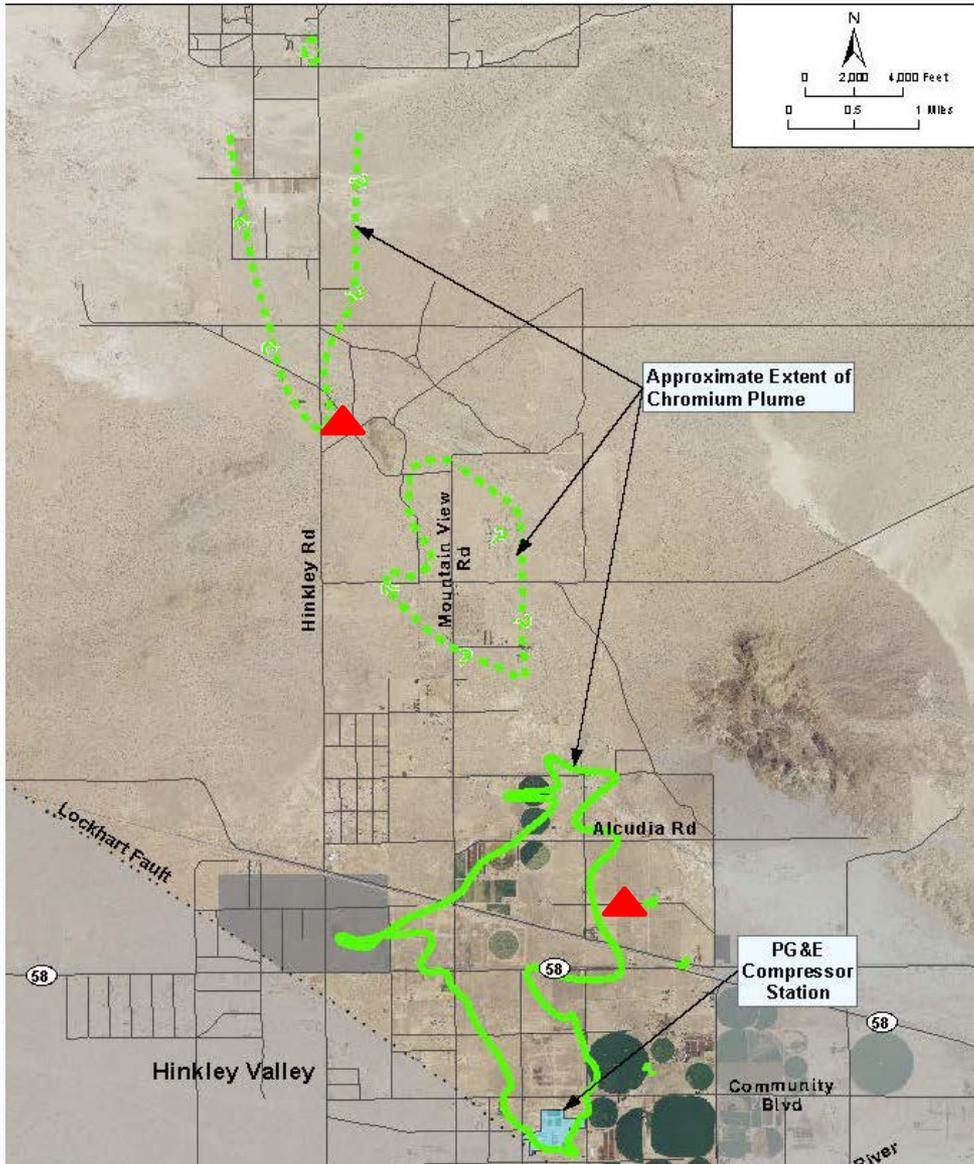
Southern plume

Lower aquifer plume

Western finger



Plume Delineation



- Requires installation of new monitoring wells (**Red triangles** near Red Hill and Summerset/Acacia)
- Requires a plan to install new wells when access status changes

Capture Metrics

- Current Capture Metrics to ensure no further migration of the southern plume.
- Water Board authorized pilot testing to adjust capture metrics southward. Results are expected in late April.
- As southern plume shrinks, Water Board wants ability to shift capture metrics to ensure plume does not migrate and allow PG&E to focus groundwater extraction and treatment in areas where chromium contamination exists.

Area of Capture Metrics for Southern Plume



Replacement Water

- **Required** when domestic well exceeds Cr6 Maximum Contaminant Level of 10 ppb
- **Replacement water plan** required if:
 - Domestic well shows increasing trend of chromium indicating likely exceedance of Cr6 MCL within one year, or
 - Domestic well reaches 8 ppb Cr6
- Existing Agricultural Treatment permit requires replacement water sooner if PG&E's activities cause chromium increases in nearby private wells



Independent Consultant

- Requires ongoing PG&E funding and support for independent consultant (IRP team)
- Sets minimum expectations for independent consultants to provide education and technical review support for Hinkley community (or PG&E can provide alternative plan that provides equal effort and effectiveness)



Independent Consultant Activities

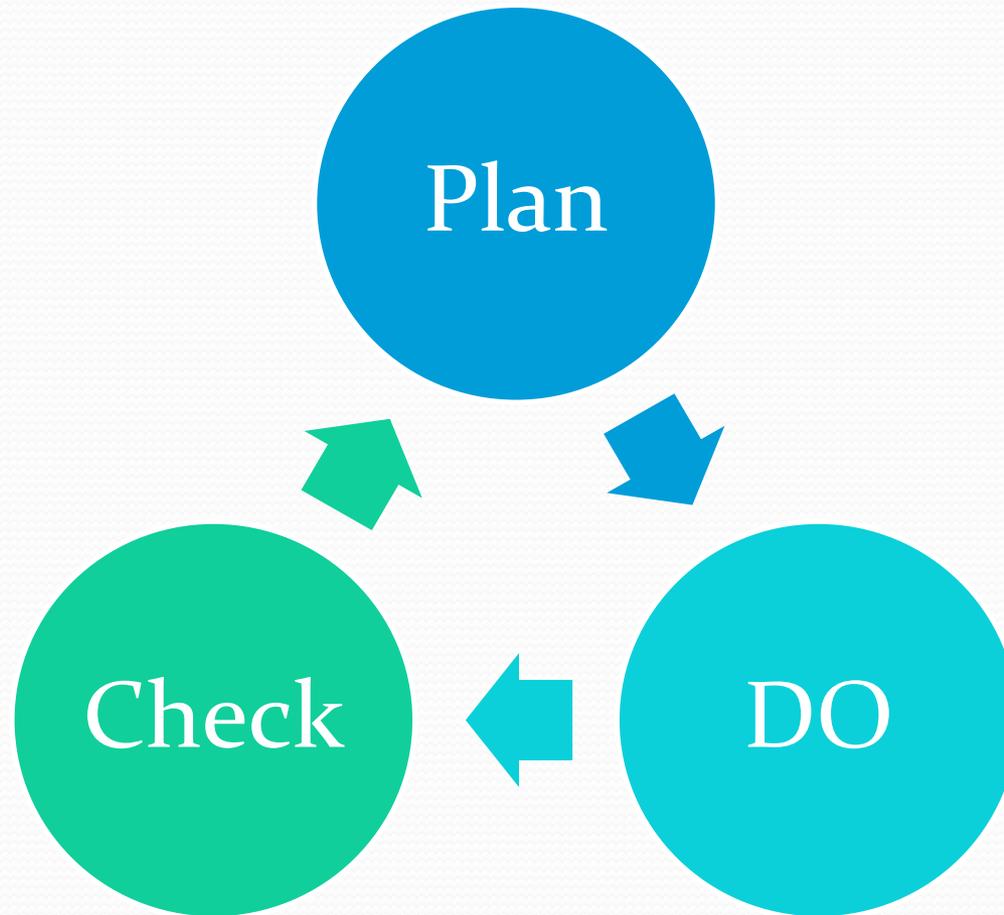
- Annual report to the Water Board on the independent consultant's efforts within the Hinkley community
- Minimum of six community newsletters each year
- Minimum of four public meetings held in Hinkley
- Availability for one-on-one communications with Hinkley residents (at least 100 hours annually)
- Technical reviews, written comments, presentations regarding Water Board orders, PG&E reports, USGS reports, other technical materials related to the chromium remediation (e.g., new cleanup technology)
- Outside expert on matter(s) of greatest concern to the community

Reporting and Evaluation

- Ongoing groundwater monitoring in domestic wells and monitoring wells. New frequencies established
- Annual report to evaluate effectiveness of cleanup compared to estimates provided by PG&E. Recommend and implement minor adjustments to improve cleanup
- Four-year Evaluation Report – comprehensive comparison of cleanup results compared to predictions. Update modeling and predict future results. Recommend changes and expanded remediation as needed to improve and speed up cleanup



Adaptive Management



How to submit comments

Email to: **RB6enfproceed@waterboards.ca.gov**

Mail to: Lahontan Water Board, attention Sue Genera
2501 Lake Tahoe Blvd.
South Lake Tahoe, CA 96150

Fax to: 530-544-2271, attention Sue Genera

or, submit comments here tonight (comment cards available)

Written comments are due March 13, 2015 by 5 pm

Next Steps

(Advisory Team will set actual schedule)

By April 13, 2015:
Additional
workshop date(s)
announced

**Spring/Summer
2015:** Workshop(s)
to discuss
comments on
proposed CAO

Summer 2015:
Release final
proposed CAO &
response to
comments

**September 16,
2015:** Water Board
may consider
adopting CAO at
public meeting



Questions and Discussion