

Lahontan Water Board

Recent Actions

Lower Aquifer

Bioreactor Pilot Test

Plume Capture Pilot Test

Adaptive Management

Proposed Cleanup and Abatement Order

Recent Actions

Lower Aquifer Remediation

(near former Desert View Dairy)

- Accepted PG&E Plan to add new extraction well – increase extraction
- Requires monitoring/verification of effectiveness

Recent Actions(continued)

Bioreactor Pilot Test

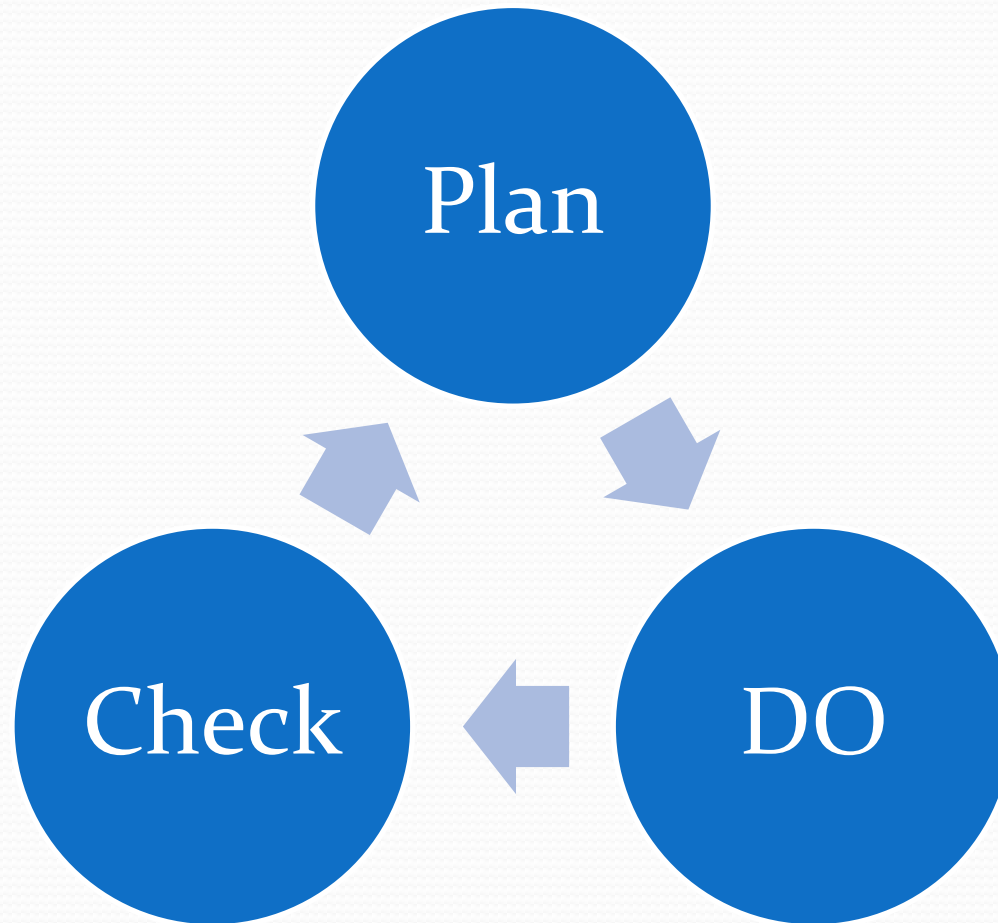
- Accepted PG&E plan
- Allows extracted water to be treated in tanks using acetic and phosphoric acids
- Requires monitoring
- Allows treated water to be re-injected into existing wells in In-situ Remediation Zone

Recent Actions (continued)

Plume Capture Metrics Pilot Test

- Accepted plan to perform pump tests
- PG&E to evaluate different extraction pumping scenarios to ensure no plume migration
- Monitoring and test results required
- Results may allow for changes to current capture metric requirements

Adaptive Management



Cleanup and Abatement Order

- Released January 21 –Draft for public and PG&E comment
- Consolidates all existing enforcement orders
- Requires cleanup
- Requires continued plume delineation
- Requires ongoing monitoring
- Requires reporting and evaluation
- Requires independent consultant for community

Cleanup

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

Plume Delineation

1. Requires installation of new monitoring wells (red hill, summerset/acacia)
2. 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 has 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 allows PG&E focuses its pumping/groundwater extraction and treatment in areas where chromium contamination exists.

Replacement Water

- Order requires replacement water
 - if domestic well shows increasing chromium concentrations that threaten to go over the 10 ppb MCL hexavalent chromium, or
 - if domestic well reaches 8 ppb
- Existing Agricultural Treatment WDRs require 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 the independent technical 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

- An annual report to the Water Board on the independent consultant's efforts within the Hinkley community
- A minimum of six community newsletters each year to disseminate information to Hinkley residents
- A minimum of four public meetings held in Hinkley
- Availability for one on one communications with individual or groups of Hinkley residents (at least 100 hours of availability)
- Production of technical reviews, written comments and presentations to respond to Water Board orders, PG&E reports, USGS reports and 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.



Questions?

Your Input is Requested!

Public workshop/s