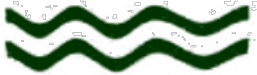




KWRA
A Joint
Powers Authority



Board of Directors

Patricia Matthews
- Chair
City of Lemoore

Diane Sharp
City of Hanford

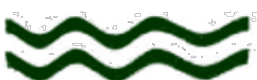
Joe Neves
County of Kings

Richard Fagundes
County of Kings

Jerry Robertson –
Vice Chair
City of Corcoran

Parveen Sandhu
Executive Director

KWRA
7803 Hanford-Armona
Road
Hanford, CA 93230
Phone: 559.583.8829
Fax: 559.582.2757



**KINGS WASTE & RECYCLING AUTHORITY BOARD OF DIRECTORS
SPECIAL MEETING**

Date: Thursday, April 4, 2024

Time: 9:00 A.M.

Location: Kings Waste and Recycling Authority
Conference Room
7803 Hanford-Armona Road
Hanford, CA 93230

Virtually on TEAMS: [Microsoft TEAMS - Click to Join Meeting](#)

In compliance with the Americans with Disabilities Act, if you have a disability and need a disability-related modification or accommodation to participate in this meeting, please contact Rosa Macias at 559-583-8829. Requests must be made as early as possible, and at least one full business day before the start of the meeting.

AGENDA

- | <u>Item No.</u> | <u>Description</u> |
|-----------------|--|
| 1. | Call to Order / Pledge of Allegiance |
| 2. | Unscheduled Appearances – Public Comment
<i>Any person may directly address the Board at this time on any item on the agenda, or on any other items of interest to the public, that is within the subject matter jurisdiction of the Board. Three (3) minutes are allowed for each item.</i> |
| 3. | Action Item: Approve a Proposal for Well Repairs with SCS Engineers |
| 4. | Upcoming Board Meeting Schedule:
Wednesday, April 24, 2024 @ 8:00 AM – Canceled
Wednesday, May 29, 2024 @ 8:00 AM
Wednesday, June 26, 2024 @ 8:00 AM – Canceled
Wednesday, July 31, 2024 @ 8:00 AM
Wednesday, August 28, 2024 @ 8:00 AM – Canceled
Wednesday, September 25, 2024 @ 8:00 AM
Wednesday, October 30, 2024 @ 8:00 AM – Canceled
Wednesday, November 27, 2024 @ 8:00 AM
Wednesday, December 25, 2024 @ 8:00 AM – Canceled |
| 5. | Adjournment |

Item No. 2

Unscheduled Appearances

Unscheduled speakers may address the Board concerning any agenda item or any activity of KWRA at the beginning of the meeting, or may elect to address the Board on any agenda item at the time that the item is called upon by the Chair but before the matter is considered by the Board in the staff report. Unscheduled comments will be limited to three minutes. The Board may permit comment through the remote teleconference line to the extent feasible.

Item No. 3

Proposal for Repairs to Monitoring Wells on Hanford Landfill

On February 21, 2024, the Kings Waste & Recycling Authority (KWRA) received notification from the Central Valley Regional Water Quality Control Board that a Report of Waste Discharge (ROWD) of the Waste Discharge Requirements (WDRs) was required for the Hanford Landfill. This ROWD requires a modification to the Corrective Action Program (CAP). The CAP implemented in 2006 was to remediate any Volatile Organic Compounds (VOCs) that can originate from the facility, which includes a ground water extraction and treatment system (GWETS). The GWETS includes one groundwater extraction well (EX-2) installed downgradient of the Facility to capture contaminated groundwater and treat VOCs with micro-bubblers installed in four 10,000-gallon tanks prior to discharge into the stormwater basin. Per the First Semiannual 2023 Monitoring Report, prepared by SCS Engineers, and an inspection conducted on January 17, 2024, the CAP is inoperable due to declining water levels in this area.

SCS Engineers propose to focus on extraction wells EX-2, EX-3, and EX-4, which are located closest to the impacted domestic wells. Groundwater samples will continue to be collected from EX-1 and EX-5 and pumps will be removed in these two wells so groundwater elevations can be measured to demonstrate capture more accurately. By utilizing EX-1 and EX-5 as groundwater observation wells, a delay in the installation of new wells for monitoring purposes can be created. Said improvements will cost \$58,032.00.

It is recommended to move forward with the proposed changes to the CAP via SCS Engineers and all costs be funded via the Landfill Capital Improvement Fund 710416.

It is requested that the KWRA Board of Directors:

- 1. Authorize the KWRA Executive Director to sign and execute the proposal with SCS Engineers and fund the proposed repairs from the Landfill Capital Improvement Fund 710416.***

Exhibit A

March 15, 2024
File No. 010369224

Ms. Parveen Sandhu
Executive Director
Kings Waste and Recycling Authority
7803 East Hanford-Armona Road
Hanford, California, 93230

Subject: Proposal to Restart the Groundwater Extraction and Treatment System (GWETS) at the Hanford Municipal Landfill, Kings Waste and Recycling Authority (KWRA), Kings County, California.

Dear Ms. Sandhu:

As requested, SCS Engineers (SCS) has prepared a proposal to restart the GWETS as part of the Site's Corrective Action Program (CAP) for the Hanford Municipal Solid Waste Landfill, located at 7803 Hanford-Armano Road, in Kings County, California.

As you know, the RWQCB sent a letter on February 21, 2024, requesting that the GWETS be restarted so that it may function per the facility's Waste Discharge Requirements (R5-2014-0086). The due date for start-up and a summary report is May 21, 2024. A summary is provided below that provides additional background information.

BACKGROUND

On November 19, 1996, the Regional Water Quality Control Board (RWQCB) issued Cleanup and Abatement Order 96-706 to the Hanford Landfill. The Order required the facility to take action to protect the Waters of the State following the detection of Volatile Organic Compounds (VOCs) in groundwater on and in the vicinity of the landfill. In response, the landfill installed five groundwater extraction wells (EX-1 to EX-5) along the western point of compliance that pumped the extracted VOC-impacted groundwater in four 10,000-gallon polyethylene holding tanks. Micro bubblers fitted at the bottom of each tank agitated the waters, reducing VOC concentration in the water.

Around 2016, the Landfill, on advice from their former consultant, reduced the GWETS from five extraction wells to one extraction well (EX-2). Since 2016, the single extraction well has been pumping at 2 gallons per minute consistently, with exceptions for maintenance. In the summer of 2022, the submersible pump for EX-2 broke down. Since this time, the CAP system has been dormant.

THE PROBLEM

Due to regional groundwater decline, the water column within the extraction wells has decreased approximately 40 feet since 2006 when they were originally installed. Currently, there is approximately 20 feet of water in each extraction well. To optimize the groundwater extraction near the two domestic residences, SCS proposes to focus on extraction wells EX-2, EX-3, and EX-4, which are located closest to the impacted domestic wells. We will continue to collect groundwater samples from EX-1 and EX-5 and will remove the pumps in these two wells so groundwater elevations can be

measured to demonstrate capture more accurately. By utilizing EX-1 and EX-5 as groundwater observation wells, we can delay the installation of new wells for monitoring purposes. SCS recommends that KWRA retains the pumps and drop pipe for potential future reuse.

The scope of work below presents the tasks to be performed by SCS to assist the Hanford Landfill with regulatory compliance related to groundwater. The proposed scope of work includes the redevelopment of the three extraction wells and the restart of the GWETS.

SCOPE OF SERVICES

The following steps will be followed for start-up of the GWETS:

- Remove the drop pipe, wiring and, pump from EX-1, EX-3, EX-4, and EX-5. The pump in EX-2 has already been removed.
- Redevelop EX-2, EX-3, and EX-4 and remove any sediment that has accumulated on the bottom of the well. During redevelopment activities, the subcontractor will pump the wells at various extraction rates to assess a pumping rate that will not dewater the well and can be sustained as an extraction rate. After the wells have been developed, the wells will be allowed to equilibrate overnight, and an accurate water column can be calculated the next morning.
- Additional drop pipe and wiring will be added to EX-3 and EX-4 to lower these pumps deeper into the water column. A new pump with drop pipe and wiring will be installed in EX-2.
- Plumb extraction wells EX-2, EX-3, and EX-4 into the existing 2-inch header pipe, install check valves at each extraction wellhead, and replace 1-inch flowmeter with 2-inch pipe and flowmeter at the at the above-ground holding tank.
- Restart extraction wells and provide quality check that system is performing satisfactorily.
- Preparation of a response letter to the RWQCB that details work completed to restart the GWETS.

The proposed not-to-exceed budget for these items is \$58,032.00, to be billed monthly on a time and materials basis. Our contractor is ready to mobilize within approximately two weeks of receiving the notice to proceed. The system must be restarted, and a summary report submitted to the RWQCB by May 21, 2024.

CLOSING

If the proposal and cost are acceptable, please provide SCS with Notice to Proceed, authorizing the work to be performed under the existing Master Services Agreement 01217064, dated March 1, 2017, and amended on March 25, 2020, and March 21, 2023, or under a new agreement, whichever is amenable to KWRA. This proposal is valid for a period of 45 calendar days from the date of submittal. Should you have questions regarding this proposal, please contact either of the undersigned.



David Nava
Staff Scientist
SCS Engineers



Patrick Harms
Project Manager, PG
SCS Engineers

**ATTACHMENT A
LABOR AND COST ESTIMATE
Hanford Landfill CAP Restart
Highway 43 and Hanford Armona Road, Kings County, California**

SCS Engineers Scope and Fee	--- Hours by Task ---			Labor Rate \$/Hour	Total, \$
	Field	Reporting	Total		
Project Director	2	4	6	287	\$1,722
Project Manager	8	6	14	262	\$3,668
Staff Professional	48	20	68	164	\$11,152
Graphics/CAD Specialist	0	2	2	166	\$332
Administrative	2	2	4	103	\$412
Total Personnel (Hours):	60	34	94		
Total Personnel Per Task (\$):	\$10,748	\$6,538			\$17,286
OTHER DIRECT COSTS (ODC)					
Field Equipment (WLM&Horiba)	300				\$300
Per Diem	600				\$600
Misc Supplies	100				\$100
Truck	1,056				\$1,056
Well Sub (Confluence)	<u>33,375</u>				<u>\$33,375</u>
Subtotal ODC (\$):	35,431	0			\$35,431
Administration @ 15% ODC (\$):	<u>5,315</u>	<u>0</u>			<u>\$5,315</u>
Total, SCS Engineers	\$51,494	\$6,538		SCS TOTAL:	\$58,032

1- Field labor to include development of 3 wells (4 Day = 40 HR) and 8 hours DT & MOB

Assumes KWRA will provide traffic control for all work that will be performed or staged in the public right of way



Central Valley Regional Water Quality Control Board

21 February 2024

Parveen Sandhu
Kings Waste and Recycling Authority
7803 Hanford-Armona Road
Hanford, CA 93230

CERTIFIED MAIL
7022 2410 0000 2157 9798

WATER CODE SECTION 13260 REQUEST FOR REPORT OF WASTE DISCHARGE, HANFORD MUNICIPAL SOLID WASTE LANDFILL, KINGS COUNTY, GLOBAL ID L10004418064

The Kings Waste and Recycling Authority (KWRA) owns and maintains the Hanford Municipal Solid Waste Landfill (Facility), which has also been referred to as the Hanford Landfill. On 6 June 2014, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) adopted Waste Discharge Requirements (WDRs) Order R5-2014-0086 regulating the Facility. The WDRs prescribed requirements for monitoring, post-closure maintenance, and corrective action. A *Corrective Action Program* (CAP) was implemented in 2006 to remediate a plume of Volatile Organic Compounds (VOCs) that originated from a release from the Facility. The CAP consists of a groundwater extraction and treatment system (GWETS) and includes one groundwater extraction well (EX-2) installed downgradient of the Facility to capture contaminated groundwater and treat VOCs with micro-bubblers installed in four 10,000-gallon tanks prior to discharge into the stormwater basin. Based on review of the *First Semiannual 2023 Monitoring Report* and a compliance inspection conducted on 17 January 2024, the CAP is inoperable due to declining water levels in the area. See the attached memorandum for additional information.

Corrective Action Specification G.13 of the WDRs requires that the KWRA submit a Report of Waste Discharge (ROWD) to make appropriate changes to the CAP within 90 days of receiving written notification from the Executive Officer that the CAP is inadequate. This letter serves as that written notification. The ROWD shall include the following:

1. A discussion as to why existing corrective action measures have been ineffective or insufficient.
2. A revised evaluation monitoring plan if necessary to further assess the nature and extent of the release.
3. A discussion of corrective action needs and alternatives.
4. Proposed alternative corrective action measures, as necessary, for:
 - a. Groundwater cleanup, and/or
 - b. Landfill gas control.

5. A plan to monitor the progress of corrective action measures consistent with MRP R5-2014-0086.
6. Cost estimates for implementing additional corrective action, including monitoring.

If the KWRA proposes to continue and/or expand operation of the GWETS, the results of modeling to determine the minimal operational flowrate to maintain/prevent further migration of the release must be submitted. Water Code section 13260 requires that "any person discharging waste, or proposing to discharge waste, that could affect the quality of waters of the state" must file "a report of the discharge containing the information that may be required by the regional board."

Water Code section 13261 states, in relevant part:

- (a) A person who fails to furnish a report or pay a fee under Section 13260 when so requested by a regional board is guilty of a misdemeanor and may be liable civilly in accordance with subdivision (b).
- (b) (1) Civil liability may be administratively imposed by a regional board or the state board in accordance with Article 2.5 (commencing with Section 13323) of Chapter 5 for a violation of subdivision (a) in an amount not exceeding one thousand dollars (\$1,000) for each day in which the violation occurs.

Pursuant to Water Code section 13260, the Central Valley Water Board requests that the KWRA submit a complete ROWD to this office **by 21 May 2024**. The Report of Waste Discharge must comply with the requirements of *Corrective Action Specification G.13* of the WDRs. Under Water Code section 13261, the Kings Waste and Recycling Authority could be liable for up to \$1,000 per day in administrative civil liabilities for every day it is in violation of this requirement. In accordance with *Corrective Action Specification G.14* of the WDRs, the KWRA shall implement the modified CAP or an alternative corrective action method within one year of Executive Officer approval. If you have any questions, please contact Elizabeth Welch at (559) 445-6127 or by electronic mail at contact elizabeth.welch@waterboards.ca.gov.



For Patrick Pulupa
Executive Officer

Enclosure: Staff Memorandum, Facilities Inspection Report

cc: CalRecycle WCMPDivision@CalRecycle.ca.gov
Troy Hommerding troy.hommerding@co.kings.ca.us
Parveen Sandhu psandhu@kwrarecycles.net

Central Valley Regional Water Quality Control Board

TO: Kristen S. Gomes
Senior Water Resource Control Engineer

Scott J. Hatton
Supervising Engineer

FROM: Elizabeth A.M. Welch
Water Resource Control Engineer

Carlos Cervantez
Engineering Geologist

DATE: 21 February 2024

WATER CODE SECTION 13260 REQUEST FOR REPORT OF WASTE DISCHARGE, HANFORD MUNICIPAL SOLID WASTE LANDFILL, KINGS COUNTY, GLOBAL ID L10004418064

The Kings Waste and Recycling Authority (KWRA) owns and maintains the Hanford Municipal Solid Waste Landfill (Landfill), which has also been referred to as the Hanford Landfill. On 6 June 2014, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) adopted Waste Discharge Requirements (WDRs) Order R5-2014-0086 regulating the Facility. The WDRs prescribed requirements for monitoring, post-closure maintenance, and corrective action. A *Corrective Action Program (CAP)* was implemented in 2006 to remediate a plume of Volatile Organic Compounds (VOCs) that originated from a release from the Facility. The CAP consists of a groundwater extraction and treatment system (GWETS) and includes one groundwater extraction well (EX-2) installed downgradient of the Facility to capture contaminated groundwater and treat VOCs with micro-bubblers installed in four 10,000-gallon tanks. After analytical results determine that the VOC concentrations of the treated water are non-detectable, effluent from the GWETS is discharged to an on-site percolation basin. VOCs from the Landfill have impacted two off-site, private wells (Martinez and Keverline), which are currently being treated with granular activated carbon filters.

The KWRA submitted the *First Semi-Annual 2023 Monitoring Report, Hanford Landfill, Kings County, California*, dated 31 August 2023 and prepared by SCS Engineers (SCS). This report states that, "Due to declining groundwater levels beneath the Landfill, there was insufficient groundwater generated by the extraction wells to operate the CAP treatment system during the first semi-annual 2023 period. KWRA and SCS are discussing options for resuming the CAP operations." The report also indicated that two

of the Martinez filters were disconnected resulting in VOC concentrations in the Martinez effluent that were about the Practical Quantitation Limit (PQL).

An annual compliance inspection was conducted on 17 January 2024, during which the GWETS was confirmed to be inoperable. See the attached *Facilities Inspection Report* for additional information.

Corrective Action Specification G.13 of the WDRs requires that the KWRA submit a Report of Waste Discharge (ROWD) to make appropriate changes to the CAP within 90 days of making the determination that the CAP is inadequate or receiving written notification from the Executive Officer that the CAP is inadequate. The ROWD shall include the following:

1. A discussion as to why existing corrective action measures have been ineffective or insufficient.
2. A revised evaluation monitoring plan if necessary to further assess the nature and extent of the release.
3. A discussion of corrective action needs and alternatives.
4. Proposed alternative corrective action measures, as necessary, for:
 - a. Groundwater cleanup, and/or
 - b. Landfill gas control.
5. A plan to monitor the progress of corrective action measures consistent with MRP R5-2014-0086.
6. Cost estimates for implementing additional corrective action, including monitoring.

COMMENTS

The GWETS was inoperable for the 2023 calendar year. In accordance with *Corrective Action Specification G.13* of the WDRs, it is recommended that the Executive Officer deem the current CAP to be inadequate and requires that the KWRA submit an amended ROWD to make appropriate changes to the CAP. If the KWRA proposes to continue and/or expand operation of the GWETS, the results of modeling to determine the minimal operational flowrate to maintain/prevent further migration of the release must be submitted. Once the CAP is approved, a revision of the WDRs will be required.

FACILITY INFORMATION

One unlined waste management unit (WMU) covering 96.4-acres

FACILITY DESCRIPTION (e.g., total area in acres, number of waste management units, etc.)

Closed

STATUS (active, inactive, closed)

Municipal solid waste.

WASTE TYPES

Class III

FACILITY CLASSIFICATION

Landfill

DISPOSAL DESCRIPTION (e.g., composting, landfill, surface impoundment, etc.)

BACKGROUND

The WMU released volatile organic compounds (VOCs) and inorganic waste constituents into groundwater. An evaluation monitoring program, which delineated the lateral and vertical extent of the VOC and inorganic waste constituent plumes, was completed in May 2002. Previously approved corrective action measures ceased without Central Valley Water Board approval but were subsequently addressed. A revised corrective action program (CAP) was incorporated into WDRs R5-2014-0086. The revised CAP includes use of a groundwater treatment system and increased landfill gas extraction.

INSPECTION GIS DATA

GIS Equipment used: Google Maps

Description of Measured Point	Latitude	Longitude	Elevation	Comments

INSPECTION OBSERVATIONS AND FINDINGS

Describe observations and findings and identify those that document and reference each violation listed in the Inspection Violations Summary table by identifying the cited violation number within parentheses following the observation/finding (e.g., Exposed waste on top deck (V1)).

Large wood/grinding piles were observed south of the WMU (Photograph 1). According to the operator, the grindings are transferred to Mid Valley Facility. The CAP treatment system is offline and has not been in use due to declining groundwater levels. The side slopes appeared to be well vegetated with no waste exposed (Photograph 2). The cover was well vegetated, no signs of ponding or waste exposure were observed (Photograph 3). The gas flare was not in operation at the time of the inspection (Photograph 4). According to the operator, the gas flare runs at 2:00 pm for 2.5 hours, excluding Sundays. The gas flare was secured by a chain-link fence. The monitoring wells were observed to be secured (Photograph 5). Labels on the monitoring well caps appeared to be fading and may require re-labeling. The drainage system appeared to be maintained and clear of obstructions.

No violations of WDRs Order No. R5-2014-0086 were observed during the inspection.

SAMPLING INFORMATION AND OBSERVATIONS

Were samples collected during the inspection? Yes No

Are sample results included in report? Yes No

Did discharger collect split samples? Yes No

SAMPLE COLLECTION INFORMATION AND OBSERVATIONS

SAMPLE ID	SAMPLE DESCRIPTION/OBSERVATIONS	SAMPLE TIME (hours)	PHOTO NO.

DISCUSSION OF SAMPLING RESULTS

Discuss sampling results (e.g., discuss whether sampling results show compliance with WDRs).

N/A

SELF-MONITORING REPORT REVIEW SUMMARY

Summarize SMR review results below.

All required monitoring reports are on file.

FILE REVIEW SUMMARY

Was a facility file review part of inspection effort?

Yes No

If not, is facility file review recommended?

Yes No

Summarize file review results below.

No compliance issues were noted.

PHOTOGRAPHS



Photograph 1. Large wood/grinding piles, south of the WMU (view east).



Photograph 2. No sign of erosion or waste exposure was observed on the side slopes (view west).



Photograph 3. No sign of erosion or waste exposure was observed on the cover of the WMU (view north).



Photograph 4. The gas flare was not in operation at the time of inspection (view north).



Photograph 5. Monitoring wells were locked.

Item No. 4

Future KWRA Board Meetings

~~Wednesday, April 24, 2024 @ 8:00 AM – Canceled~~
Wednesday, May 29, 2024 @ 8:00 AM
~~Wednesday, June 26, 2024 @ 8:00 AM – Canceled~~
Wednesday, July 31, 2024 @ 8:00 AM
~~Wednesday, August 28, 2024 @ 8:00 AM – Canceled~~
Wednesday, September 25, 2024 @ 8:00 AM
~~Wednesday, October 30, 2024 @ 8:00 AM – Canceled~~
Wednesday, November 27, 2024 @ 8:00 AM
~~Wednesday, December 25, 2024 @ 8:00 AM – Canceled~~

KWRA Administration Building
7803 Hanford Armona Road
Hanford, CA 93230

Item No. 5
Adjourn