



California Regional Water Quality Control Board

Lahontan Region



Linda S. Adams
Secretary for
Environmental Protection

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www.waterboards.ca.gov/lahontan

Arnold Schwarzenegger
Governor

OCT 16 2007

Hector Rodriguez, City Manager
City of Barstow
220 East Mountain View Street, Suite A
Barstow, CA 92311

CERTIFIED MAIL: 7006 2150 0005 2933 8111

COMPLAINT NO. R6V-2007-0026 FOR ADMINISTRATIVE CIVIL LIABILITY ISSUED TO THE CITY OF BARSTOW, FOR THE VIOLATION OF WASTE DISCHARGE PROHIBITIONS SPECIFIED BY THE WATER QUALITY CONTROL PLAN FOR THE LAHONTAN REGION, AND VIOLATION OF BOARD ORDER NO. 6-94-26 FOR THE UNAUTHORIZED DISCHARGE OF UNTREATED WASTEWATER TO HALF WAY WASH AND THE MOJAVE RIVER, SAN BERNARDINO COUNTY, WDID NO. 6B360101001

Enclosed is the above-referenced Administrative Civil Liability Complaint (Complaint). The Complaint in the amount of **\$300,000** contains allegations that the City of Barstow (City) violated waste discharge prohibitions specified by the *Water Quality Control Plan for the Lahontan Region* (Basin Plan), and waste discharge requirements specified by Board Order No. 6-94-26. Specifically, the City violated Basin Plan prohibitions and waste discharge requirements when its wastewater treatment plant facility discharged 1.5 million gallons of untreated wastewater to Half Way Wash and the Mojave River on May 20 and 21, 2006. This letter outlines the Lahontan Water Board's procedures and options for processing the Complaint.

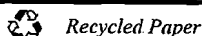
City Waives Hearing

If the City decides to waive a hearing regarding this matter and remit payment to the Lahontan Water Board, sign and return the original WAIVER OF HEARING form (enclosed) to our South Lake Tahoe office. In accordance with the State Water Resources Control Board's (State Water Board) Enforcement Policy, a 30-day public review period will be provided prior to the Lahontan Water Board considering acceptance of any settlement of proposed administrative civil liability, to allow other persons an opportunity to comment on the action.

There are two possible outcomes following the 30-day public review period. Those outcomes are:

Staff receives no new information and the settlement of the Complaint in the amount of **\$300,000** is final.

California Environmental Protection Agency



Staff receives new information that convinces staff that settling the Complaint for **\$300,000** may not be in the public interest. In this scenario, staff would issue a new Complaint and schedule a public hearing for a future Lahontan Water Board meeting to be held within 90 days of issuing the new Complaint. The public hearing would be the venue for all interested parties to present evidence to the Lahontan Water Board concerning the allegations stated in the new Complaint.

City Does Not Waive Hearing

If the City chooses not to waive the hearing, a hearing will be held at the Lahontan Water Board's **November 28 and 29, 2007** meeting. To ensure the Lahontan Water Board has the opportunity to fully study and consider written material, all material must be submitted at least ten (10) days before the hearing. This will allow distribution of material to the Lahontan Water Board Members in advance of the hearing. Pursuant to California Code of Regulations, title 23, section 648.4, the Lahontan Water Board Chair may refuse to admit written testimony into evidence if submitted late, unless the proponent can demonstrate why he or she was unable to submit the material on time or that compliance with the deadline would otherwise create a severe hardship. If any other party demonstrates prejudice from the late admission of the written testimony, the Lahontan Water Board may refuse to admit it.

Schedule for Processing ACL Complaint

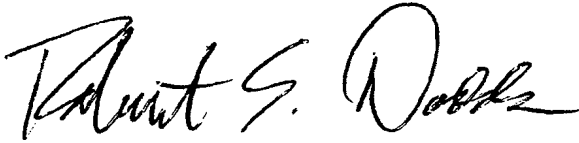
The City of Barstow may submit the Waiver of Hearing Form and payment of the recommended liability at any time up to **November 28, 2007**. However, if Lahontan Water Board staff does not receive the Waiver of Hearing Form and payment of the recommended liability by **October 26, 2007**, staff will schedule a hearing and prepare an Administrative Civil Liability Order for the Lahontan Water Board's consideration at its **November 28 and 29, 2007** meeting. The City and/or its representative would then have an opportunity to contest before the Lahontan Water Board the allegations and amount of recommended liability presented in Administrative Civil Liability Complaint No. R6V-2007-0026.

The City now has the opportunity to meet with Lahontan Water Board staff to discuss the allegations, the recommended liability, and the potential for settling the Complaint. If interested in such a meeting, please contact me as soon as possible.

Right to Petition

The City may petition the State Water Board to review the decision of the Lahontan Water Board in accordance with Water Code section 13320 and California Code of Regulations, title 23, section 2050. The State Water Board must receive the petition within 30 days after the Lahontan Water Board meeting at which the action will be taken. Copies of the law and regulations applicable to filing petitions will be provided upon request.

If you have any questions or comments regarding this matter, please contact John Steude at (530) 542-5571, Scott Ferguson at (530) 542-5432, or me at (530) 542-5410.



Robert S. Dodds
Assistant Executive Officer

Enclosures: Complaint No. R6V-2007-0026
Waiver of Hearing Form

cc (w/enclosures): Board Members/California Regional Water Quality Control Board,
Lahontan Region
David Boyers/State Water Resources Control Board, Office of
Enforcement
Mark Bradley/State Water Resources Control Board, Office of
Enforcement
David Coupe/State Water Resources Control Board, Office of Chief
Counsel
Harold J. Singer/Lahontan Regional Water Quality Control Board
Leon Conder
Chuck Monds
Christina Byrne

JSS/adw/T: Barstow Sewage Spill ACL-Cover letter (10-11-2007)
File Under: SLT File Room, VVL Files, City of Barstow Wastewater Treatment Plant (San Bernardino County)
File Under: VVL File Room, City of Barstow Wastewater Treatment Plant (WDID No. 6B360101001)





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STATE OF CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD LAHONTAN REGION

In the Matter of the City of Barstow California:)
Violation of the Waste Discharge Prohibitions Prescribed)
in the <i>Water Quality Control Plan for the Lahontan Region</i> ,) COMPLAINT NO.
and Violation of Waste Discharge Requirements Specified) R6V-2007-0026
by Board Order No. 6-94-26, for the Unauthorized) FOR ADMINISTRATIVE
Discharge of Untreated Wastewater to the Mojave River-) CIVIL LIABILITY
San Bernardino County, WDID No. 6B360101001)

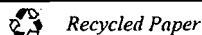
CITY OF BARSTOW, YOU ARE HEREBY GIVEN NOTICE THAT:

1. You are charged with violating provisions of law and regulations for which the California Regional Water Quality Control Board, Lahontan Region (Water Board) may impose administrative civil liability pursuant to California Water Code (Water Code) section 13350, subdivision (a)(2).
2. Unless waived, a hearing on this matter will be held before the Water Board within 90 days following the issuance of this Complaint. The City of Barstow, or its representatives, will have an opportunity to address and contest the allegations in this Complaint and the imposition of civil liability by the Water Board. An agenda showing the approximate time set for the hearing will be mailed to you not less than ten days before the hearing date.
3. At the hearing, the Water Board will consider whether to affirm, reject, or modify (either increase or decrease) the proposed civil liability, or whether to refer the matter to the Attorney General for recovery of judicial civil liability.

ALLEGATIONS

4. The City of Barstow ("Discharger") is the owner of the Barstow Wastewater Treatment Plant ("Facility"), located at 2200 East Riverside Drive, Barstow, California, approximately one mile southeast of the City of Barstow business district, as shown in Attachment A of this Complaint.

California Environmental Protection Agency



5. The Facility receives and treats domestic and industrial wastewater from the Discharger's sewer service area. The Facility is designed to treat up to 4.5 million gallons per day (mgd), and is currently treating on average 2.6 mgd. Wastewater treatment processes include preliminary treatment, primary clarification, and activated sludge. The Discharger uses eight percolation ponds and one fodder crop irrigation site for secondary-treated effluent disposal.

Prior to beginning the treatment process, wastewater from the collection system enters an influent pump station, which lifts the sewage to an elevation where it can flow by gravity through the Facility. Three influent pumps are housed in the influent pump station. Two of the three influent pumps are operated by variable frequency drive electric motors. Emergency backup power is supplied to the influent pump station by the Facility's primary generator.

6. In January 2004, the Discharger entered into a contract with Aquarion Operating Services Company, now known as AOS Operating Service Company ("Aquarion"). The contract specifies the requirements under which Aquarion is to provide operation and maintenance services for the Facility.
7. The Discharger is subject to waste discharge requirements specified by Board Order No. 6-94-26 for the collection, treatment, and disposal of domestic and industrial wastewater within the City's sewer service area. This Board Order is not a National Pollutant Discharge Elimination System (NPDES) permit.
8. On Saturday, May 20-21, 2006, the Facility discharged 1.5 million gallons of raw sewage to Half Way Wash¹ and the Mojave River. Half Way Wash is a tributary of the Mojave River. Half Way Wash and the Mojave River are "surface waters" as the term is defined in Board Order No. 6-94-26, and are "waters of the state" of California as the term is defined in the Water Code.
9. The May 20-21, 2006 discharge occurred as follows:
 - a. On Saturday, May 20, 2006 at 12:39 p.m., a "power spike" from the Southern California Edison (SCE) power grid caused the primary and secondary generators at the Facility to begin operating and providing power to the Facility. The two influent pumps' variable frequency drives are designed to operate at a nominal voltage of 480 Volts - Alternating Current (V-AC), with an allowable voltage variation of + 20 V-AC. The primary generator was set to deliver power at 510 V-AC, exceeding the variable frequency drives' acceptable voltage envelope (480 - 500 V-AC). This situation caused the variable frequency drives on the two influent pumps to shut down due to over-voltage. The third influent pump was out of service at the time of the power spike.

¹ Identified on Federal Emergency Management Agency (FEMA) map no. 06071C3938 F dated 18 March 1996. Referred to as "Storm wash" in Aquarion spill report dated 24 May 2006. (See Attachment A)

According to statements made by Timothy Glaza (Shasta Electric Service Manager) and Kody Tompkins (Aquarion employee, Grade II wastewater treatment plant operator), once the variable frequency drives shut down due to excessive voltage, they must be manually restarted.

- b. The main power from SCE was quickly restored, however, the primary generator's automatic transfer switch failed to transfer the power supply for the variable frequency drives from the generator back to the SCE power supply. Had the automatic transfer switch worked properly and switched back to main power, the pumps would still not have worked because the variable frequency drives needed to be manually reset once they were tripped off due to the higher than acceptable voltage they received from the emergency generator.
- c. Between 12:51 p.m. and 1:17 p.m., the Facility generated a series of alarms (e.g., south scum pump high level and well flooded). Hi Desert Alarm and Fire Sprinklers Company ("Alarm Company") received the alarms. The Alarm Company recorded the alarms, but did not contact Facility on-call staff. According to Mr. Tompkins, the Alarm Company informed him at 8:30 a.m. on May 21, 2006 that a new Alarm Company employee made a mistake. Apparently, multiple alarms came on and several, but not all alarms, automatically reset or shut off. The new employee did not reconcile all the alarms that came on with the ones that shut off. The result was that alarms remained on, but unacknowledged by the new employee.
- d. At approximately 1:30 p.m., the influent pump station wet well and sewer trunk line exceeded their capacity and untreated sewage began discharging from a manhole located on Riverside Drive, approximately 40 feet south of the Facility's westernmost percolation pond.
- e. The following morning of May 21, 2006 at 7:00 a.m., Mr. Tompkins arrived at the Facility for a routine plant check, and observed the untreated wastewater discharging from the above-referenced manhole. Mr. Tompkins also observed the discharge flowing into Half Way Wash located 20 feet from the Facility's westernmost percolation pond, and subsequently into the Mojave River. Approximately 1.36 miles of the river were directly affected by the discharge. The May 24, 2006 spill report submitted by Aquarion documented that 1.5 million gallons of untreated wastewater were discharged from the manhole, which entered Half Way Wash and subsequently the Mojave River.
- f. Mr. Conder, a resident in the Soap Mine Road community, which is located across the river from the Facility, also discovered the wastewater spill at 7:00 a.m. on May 21, 2006.
- g. In response to observing the discharge, Mr. Tompkins made an emergency call requesting that additional Facility staff respond to the situation. Mr. Tompkins then parked a truck over the surcharging manhole to reduce the discharge rate.

Mr. Tompkins also discovered that the primary generator was running and primary power was on, but both influent pumps were off. He reset one variable frequency drive unit, which shut down a few minutes later as it was still receiving power from the primary generator at 510 V-AC. Mr. Tompkins attempted to reset the variable frequency drive a second time with the same result of shutting down due to high voltage.

- h. At approximately 8:30 a.m., a second wastewater treatment plant operator arrived at the Facility. That operator turned the primary generator off and also noticed the automatic transfer switch was not functioning properly. After manually resetting the automatic transfer switch to the SCE power grid, routine power was provided to the variable frequency drives, which were then manually reset, and the influent pump station returned to normal operation.
- i. At 8:45 a.m., Shasta Electric Company was called to diagnose the Facility's power problems. When Mr. Glaza, the company's employee, arrived on site, he determined that the root cause of the influent pump station's failure was the primary generator's high output voltage setting which tripped off the variable frequency drives.
- j. Beginning at approximately 9:00 a.m., Facility staff began disinfecting the immediate discharge area and areas of standing wastewater, and began inspecting and assessing the entire spill site.
- k. During the afternoon of May 21 2006, Mr. Leon Conder and another nearby resident, Mr. Chuck Monds, drove to the spill site and took photographs of the spill site.
- l. On Monday, May 22, 2006 at approximately 8:15 a.m., the Water Board was notified by Dan Friou (Aquarion employee-Grade IV wastewater treatment operator) of the discharge incident. At 8:59 a.m., Mr. Perales (Aquarion employee - Barstow Wastewater Facility Manager) informed the California Office of Emergency Services of the discharge incident. This call was made approximately 24 hours later than it should have been as required by the Water Code. Water Code section 13271(a)(1) states:

"...any person who...discharged in or on any water of the state, shall, as soon as (1) that person has knowledge of the discharge, (2) notification is possible, and (3) notification can be provided without substantially impeding cleanup or other emergency measures, immediately notify the Office of Emergency Services of the discharge..."

The Office of Emergency Services accepts spill notifications 24 hours per day, seven days per week.

- m. Aquarion staff began major cleanup operations at the Mojave River spill site on May 22, 2006.
- n. Approximately 1,200 pounds of sewage debris were collected during the cleanup of Half Way Wash and the Mojave River. The debris was stored at the Facility pending waste characterization results. The debris was disposed of at the Barstow Landfill. Disposal activities were completed on November 22, 2006.

10. Violation – Basin Plan Prohibitions

The Discharger violated the following prohibitions specified in the *Water Quality Control Plan for the Lahontan Region* (Basin Plan), adopted pursuant to Water Code section 13243.

- A. "The Discharge of untreated sewage, garbage, or other solid wastes into surface waters of the Region is prohibited." (Basin Plan Region-Wide Prohibition No. 4)
- B. "The discharge, bypass, or diversion of raw or partially treated sewage, sludge, grease, or oils to surface waters is prohibited." (Basin Plan Region-Wide Prohibition No. 5(a))
- C. "The discharge of wastewater except to the designated disposal site (as designated in waste discharge requirements) is prohibited." (Basin Plan Region-Wide Prohibition No. 5(b))

The Discharger violated prohibitions A, B and C cited above when approximately 1.5 million gallons of untreated wastewater (raw sewage) were discharged into Half Way Wash and the Mojave River. Half Way Wash and the Mojave River are surface waters of the State within the Lahontan Region. The waste discharge requirements prescribed by Board Order No. 6-94-26 do not designate Half Way Wash or the Mojave River as authorized disposal sites.

11. Violation – Waste Discharge Requirements, Board Order No. 6-94-26

- a. The Discharger violated the following discharge specifications specified by Board Order No. 6-94-26:
 - D.1. "There shall be no discharge, bypass, or diversion of raw or partially treated sewage, sewage sludge, grease, or oils from the collection, transport, treatment, or disposal facilities to adjacent land areas or surface waters."
 - D.4. "The discharge shall not cause a pollution as defined in Section 13050 of the California Water Code, or a threatened pollution."

D.5. "Neither the treatment nor the discharge shall cause a nuisance as defined in Section 13050 of the California Water Code."

D.6. "The discharge of wastewater except to the authorized disposal/ reclamation sites is prohibited."

The Discharger violated Discharge Specifications No. D.1 and D.6 when untreated wastewater (raw sewage) was discharged from the Facility to Half Way Wash and the Mojave River, nearby surface waters. Half Way Wash and the Mojave River are not authorized disposal or reclamation sites per Board Order No. 6-94-26.

The Discharger violated Discharge Specification No. D.4 when untreated wastewater was discharged to Half Way Wash and the Mojave River, which, at a minimum, resulted in a threatened pollution. Water Code section 13050(l)(1) defines pollution as

"... an alteration of the quality of the waters of the state by waste to a degree which unreasonably affects either of the following:

- (A) The waters for beneficial uses.
- (B) Facilities which serve these beneficial uses."

The Basin Plan identifies the beneficial uses for the Mojave River, which in part include non-contact recreation (REC-2). The discharge of 1.5 million gallons of untreated wastewater to Half Way Wash and the Mojave River altered water quality conditions within the two surface waters to a degree that at a minimum, threatened to unreasonably affect the REC-2 beneficial use (e.g., hiking, horseback riding, off-road vehicular use, scenic enjoyment of the waters). Such conditions constitute a threatened pollution in violation of Discharge Specification No. D.4.

The Discharger violated Discharge Specification D.5 when untreated wastewater was discharged to Half Way Wash and the Mojave River, waters of the State, and created a condition of nuisance. Water Code section 13050(m) defines nuisance as

"anything which meets all of the following requirements:

- (1) Is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property.
- (2) Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal.

(3) Occurs during, or as a result of, the treatment or disposal of wastes.”

The discharge of 1.5 million gallons of untreated wastewater, which resulted from improper equipment settings and/or equipment failure at the Facility, created conditions that the public typically finds offensive to the senses (e.g. odor, unpleasing aesthetic/visual conditions). The discharge directly affected an approximately 1.36-mile section of the river, which required use of heavy equipment to clean up the site. The unsightly conditions and odors associated with the discharge, and the noise and dust associated with heavy equipment operations, affected members of the Soap Mine Road community, and people that use the river for recreational purposes.

b. The Discharger violated the following September 1, 1994 Standard Provision attached to Board Order No. 6-94-26:

“The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the Discharger to achieve compliance with the WDRs. Proper operation and maintenance includes adequate laboratory control, where appropriate, and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by the Discharger, when necessary to achieve compliance with the conditions of the WDRs.”

During a July 13, 2006 joint inspection, State Water Board and Lahontan Water Board staffs discovered that the Facility staff could not recall ever testing the two emergency power generators under load, which Mr. Glaza reported to the Water Board staffs should be conducted on at least a quarterly basis. Lahontan Water Board staff has since surveyed six wastewater agencies² within the region regarding their generator testing programs. The survey results showed that five out of the six wastewater agencies test under load their generators that provide emergency backup power to critical system components³. Such testing occurs at a minimum of semi-annually and as frequently as monthly.

Maintenance records were also disorganized, which made tracking necessary maintenance activities difficult. Additionally, Facility staff could not effectively operate the computerized maintenance records system to generate or track equipment work orders, further complicating facility maintenance activities. The Discharger has no updated as-built plans or other wiring information for the Facility's electrical system that reflects what was last upgraded in 1997. This situation further complicates and delays troubleshooting activities. These conditions are examples of an inadequately maintained wastewater treatment

² Susanville CSD, Lake Arrowhead CSD, Mammoth CWD, Tahoe-Truckee Sanitation Agency, Victor Valley Wastewater Reclamation Authority, and South Tahoe PUD

³ For purposes of this Complaint, “critical system components” are identified as sewer collection system components or wastewater treatment system components where during an interruption in the regular power supply, a discharge is eminent without emergency backup power.

facility, and were largely responsible for causing and/or exacerbating the May 20-21, 2006 discharge incident, which violated the Discharger's waste discharge requirements.

12. Administrative Civil Liability Authority

The Water Board may impose civil liability pursuant to Water Code section 13350, subdivision (a). Water Code section 13350, subdivision (a) states, in part:

"Any person who...(2) in violation of any waste discharge requirement, waiver condition, certification, or other order or prohibition issued, reissued, or amended by a regional board or the state board, discharges waste, or causes or permits waste to be deposited where it is discharged, into the waters of the state... shall be liable civilly, and remedies may be proposed, in accordance with subdivision (d) or (e)."

The Discharger violated Basin Plan prohibitions adopted pursuant to Water Code section 13243, as described in Finding No. 10, above. The Discharger violated waste discharge requirements specified by Board Order No. 6-94-26, as described in Finding No. 11, above. The May 20-21, 2006 discharge incident resulted in waste being discharged into waters of the state. The Water Board is therefore, authorized to impose civil liability pursuant to Water Code section 13350.

PROPOSED CIVIL LIABILITY

13. Civil Liability – California Water Code

For the violation of Basin Plan prohibitions and waste discharge requirements, the Water Board may impose civil liability in an amount up to that specified by Water Code section 13350, subdivision (e).

Water Code section 13350, subdivision (e) states, in part:

"(e) The state board or a regional board may impose civil liability administratively pursuant to Article 2.5 (commencing with Section 13323) of Chapter 5 either on a daily basis or on a per gallon basis, but not both.

(1) The civil liability on a daily basis may not exceed five thousand dollars (\$5,000) for each day the violation occurs.

(2) The civil liability on a per gallon basis may not exceed ten dollars (\$10) for each gallon of waste discharged. "

In this matter, the maximum amount of civil liability under Water Code section 13350, subdivision (e)(2) is \$15,000,000 for the discharge of 1.5 million gallons of untreated wastewater from the City of Barstow's Wastewater Treatment Plant to waters of the state. This civil liability is based upon:

$$1.5 \text{ million gallons} \times \$10/\text{gallon} = \mathbf{\$15,000,000}$$

The discharge does not meet the criteria for assessing a mandatory minimum penalty.

14. Factors Affecting the Amount of Civil Liability

Water Code section 13327 requires the Water Board to consider enumerated factors when it determines the amount of civil liability for a discharge covered by section 13350. The Assistant Executive Officer of the Water Board considered those factors in recommending the amount of the administrative civil liability:

- a. The nature, circumstances, extent, and gravity of the violations;

The 1.5 million gallons of untreated wastewater discharged to Half Way Wash and the Mojave River was preventable with appropriate Facility maintenance. Simply testing the primary generator under load would have revealed the incorrect voltage setting, thereby avoiding the root cause of the discharge. Such testing should be routine based upon Mr. Glaza's statements, and is commonly practiced by other wastewater agencies within the Lahontan Region, based upon an informal Lahontan Water Board staff survey.

The discharge violated Basin Plan prohibitions and waste discharge requirements intended to prevent water quality impacts that adversely affect beneficial uses. The discharge adversely affected the non-contact recreation beneficial use, created a threatened pollution, and created a nuisance condition, as described in Finding No. 11. The discharge also placed ground water quality at risk, given the large discharge volume, and the relatively shallow ground water depth (approximately 12 - 24 feet below ground surface)⁴. These conditions all represent significant violations with actual and potential impacts to water quality and beneficial uses.

- b. Whether discharge is susceptible to cleanup or abatement;

The discharge to Half Way Wash and the Mojave River was susceptible to partial cleanup⁵, and the Discharger and its contractor implemented cleanup actions upon abating the discharge. On May 21, 2006, a berm (see Attachment A) was constructed along Half Way Wash and the Mojave River to prevent additional sewage from reaching the Mojave River. On August 31, 2006, the Water Board

⁴ USGS Hydrographs for Ground Water Wells near Facility. Draft DRPA Ground Water Depth Maps dated May 22, 2007.

⁵ An unknown portion of the discharge infiltrated into the soils of Half Way Wash and the Mojave River, and were not recoverable.

received a City report that in part certified that all solid waste and debris piles had been removed from the Mojave River and were being stockpiled at the Facility, pending waste characterization and final disposal. The Discharger certified that final cleanup and disposal activities were completed on November 22, 2006. Completing cleanup activities followed four Lahontan Water Board staff inspections (spanning the June - September 2006 time period) that emphasized the need for expedient cleanup.

c. The degree of toxicity of the discharge;

Raw sewage contains bacteria and viruses known to be harmful to human health and the environment. There was, however, no specific analysis of the discharge to determine the degree of toxicity.

d. Ability to pay;

There are an estimated (2007) 24,300 residents⁶ receiving sewer services from the Discharger within Barstow's city limits. The State Water Resources Control Board's May 2007 *Wastewater User Charge Survey* for fiscal year 2006-2007 reported that the City's monthly sewer user fee per connection was \$13.00^{7,8}. The City's monthly fee is approximately 62 percent of the average monthly fee for 15 wastewater agencies throughout California, including the City, with populations ranging between 18,000 and 27,000. Additionally, the City's sewer connection fee is approximately 46 percent of the average sewer connection fee for the same 15 wastewater agencies. The Discharger's annual projected sewer revenue for 2007 is \$4,623,000⁹. The Discharger now has the opportunity to provide additional financial data to the Water Board regarding its ability to pay the proposed liability.

e. The effect on the Discharger's ability to continue its business;

Water Board staff is not aware of any reason that the Discharger's ability to continue its business would be affected by the proposed liability. The Discharger now has the opportunity to provide any information to the Water Board showing an inability to continue its business due to payment of the proposed liability.

f. Any voluntary cleanup efforts undertaken by the violator;

The Discharger initiated cleanup activities prior to contacting the Water Board or any other agencies that would order such activities.

⁶ City of Barstow State Revolving Fund Loan Application for Project No. C-06-4912-110 to the Division of Financial Assistance

⁷ <http://www.waterboards.ca.gov/general/publications/docs/wastewatersurvey0607.pdf>

⁸ The monthly sewer user fee per connection has since increased to \$15, based upon September 24, 2007 personal communication between Lahontan Water Board and City staffs.

⁹ City of Barstow State Revolving Fund Loan Application for Project No. C-06-4912-110 to the Division of Financial Assistance

g. Prior history of violations;

The Discharger has thirty (30) documented unauthorized discharges from the Facility and sewer collection system since November 11, 1993. Three of the discharges reached the Mojave River, as documented in the State Water Board's California Integrated Water Quality System.

h. Degree of culpability;

The City of Barstow is identified as the "Discharger" by the waste discharge requirements prescribed by Board Order No. 6-94-26 and thus, is ultimately responsible for compliance with Board Order No. 6-94-26 and applicable state laws and regulations. This responsibility extends to ensuring that the City's contractors that operate and maintain its wastewater facilities do so in a manner that complies with Board Order No. 6-94-26 and applicable state laws and regulations. The City of Barstow is therefore, responsible for the May 20-21, 2006 discharge of 1.5 million gallons of untreated wastewater that directly affected Half-Way Wash and approximately 1.36 miles of the Mojave River.

Additionally, the results of a State Water Board/Lahontan Water Board joint inspection demonstrate that the Facility was not being adequately maintained. On July 13 and 14, 2006, State Water Board and Lahontan Water Board staff toured the Facility and interviewed Facility staff (Aquarion employees) and City staff. The inspection and interviews revealed numerous problems with plant equipment, which included the following:

- Mixer motor in the headworks mixing chamber had been out of service since April of 2006;
- Influent pump No. 3 had been out of service since June of 2006;
- Blower No. 1 was out of service, while blowers No. 2 and 3 were not in optimal condition;
- Gravity thickener sludge pump No. 2 was not working properly;
- Valve for clarifier No. 1 scum pit was stuck in the open position;
- Secondary clarifier No. 2 was out of service (return activated sludge pump motor has been out of service for about a week);
- Clarifier No. 4 was missing two scraper flights;
- Sump pump in the pipe gallery was out of service;
- Air diffusers and distribution system were plugged and/or leaking;
- There have been no updated as-built plant process diagrams or electrical diagrams that reflect Facility modifications completed in 1997; and
- Mr. Glaza stated that the generator should have been tested under load at least quarterly, and that the testing was something an operator could be easily trained to do.

Review of the Facility's maintenance program during the joint inspection revealed an unorganized and inadequate maintenance program. Facility staff was unable to use the computer-based system to retrieve the majority of maintenance records. The computer-based system is intended to track preventative and corrective maintenance activities and generate and track maintenance work orders. Hard copies of maintenance records were also unorganized, being located among numerous folders and the plant log book. The records that could be retrieved indicated a general lack of maintenance activity at the Facility.

Staff's investigation also revealed an absence of standard operating procedures regarding maintenance and spill response/reporting activities and inadequate training regarding these activities. Furthermore, there have been no updated wiring plans for the Facility's electrical system since the system was upgraded in 1997. This further complicates maintaining the electrical system and responding to emergency situations that involve the electrical system, such as the May 20-21, 2006 discharge incident.

Finally, there was a general consensus among the Facility staff that the Facility was significantly understaffed and inadequately supervised. Prior to being turned over to the contract operators, the plant was generally staffed by 10-12 people (according to the City representatives). The staffing level at the time of the inspection was approximately half of that number. At the time of the discharge incident, no wastewater treatment plant operators regularly staffed the Facility during weekends but were on call. One operator now staffs the Facility during the weekend¹⁰.

The Discharger is ultimately responsible for ensuring that adequate staffing, maintenance, and operational procedures are in place and/or occurring to ensure compliance with Board Order No. 6-94-26 and applicable state laws and regulations. The paragraphs above show a general lack of standard operating procedures, inadequate maintenance, and poor maintenance tracking leading up to the May 20-21, 2006 discharge incident. These conditions were the primary cause of the May 20-21, 2006 discharge of untreated wastewater into the Mojave River and are the Discharger's responsibility, whether it directly operates the Facility or contracts out Facility operations.

i. Economic savings resulting from the violation;

Water Board staff has not calculated the Discharger's actual cost savings. Determining such costs would require expertise in understanding the Facility's specific maintenance requirements, the length of time required maintenance had been deferred, and the costs of the deferred Facility maintenance. Water Board staff does not have such expertise or understanding.

¹⁰ City of Barstow, Response to the Notice of Violation. October 20, 2006.

- j. Other matters as justice may require.

Staff Costs

Staff from the State and Regional Water Boards have spent time responding to the incident and preparing the Administrative Civil Liability Complaint. Estimated staff costs for incident response, investigation, and complaint preparation are \$16,700.

Alarm Company Involvement

The failure of the Hi Desert Alarm and Fire Sprinklers Company to notify the on-call Facility staff of the high wet well conditions significantly extended the discharge period, and was beyond the Discharger's control. Had the alarm company contacted on-call Facility staff, the discharge volume might have been significantly reduced. The alarm company's failure to contact Facility staff extended the discharge period for approximately 18 hours. This is the time period from when the alarm company received the high level alarm (approximately 1:00 p.m. on May 20, 2006) to the time Facility staff performed its routine facility check on Sunday morning (approximately 7:00 a.m. on May 21, 2006).

Based on information obtained from Facility staff for the typical response time to an alarm, the alarm company calls staff within five minutes of an alarm and staff arrive on site within six minutes of the call from the alarm company. Facility staff's experience with responding to a pump failure is that there is approximately 35 minutes from the sounding of an alarm before overflow occurs from the manhole on Riverside Drive. Under typical circumstances, Facility staff can respond and prevent an overflow within 35 minutes.

On May 21, 2006, approximately 90 minutes passed before Facility staff could diagnose the electrical problem, and successfully restore the influent pump station to normal operations. Therefore, without the compounding error of the alarm company, the bypass discharge would have lasted approximately 66 minutes (Alarm Company response time (five minutes) plus Facility on-call staff response time (six minutes) plus diagnostic/corrective time period (90 minutes) minus sewer system holding time (35 minutes). At a typical afternoon flow rate of approximately 900 gallons per minute, approximately 59,400 gallons (900 gallons per minute X 66 minutes) would have discharged to waters of the state, absent the compounding error of the alarm company. Based on this analysis, approximately 1,440,000 gallons of the sewage spill can be attributed to the failure of the alarm company to notify Facility staff about the alarm.

Facility Maintenance

While the alarm company's failure played a significant role in the length of the discharge period, it does not diminish the primary cause of the discharge, which

was inadequate Facility maintenance (e.g., high voltage setting on the emergency power generator for the influent pumps and not routinely testing the generator under load). Additionally, staff's investigation of the May 20-21, 2006 discharge incident revealed unorganized maintenance records, Facility staff's inability to access maintenance records, inconsistent practices for initiating and documenting maintenance activities, out-of-date electrical plans for the Facility, and lack of Facility staff training. These are additional examples of an inadequate maintenance program for the City's Facility, which if they were to continue, would likely lead to future unauthorized discharges of waste to nearby waters of the state.

14. Amount of Civil Liability

The Assistant Executive Officer of the Water Board considered the above factors and proposes that administrative civil liability be imposed by the Water Board in the amount of **\$300,000**, pursuant to Section 13350 of the Water Code.

WAIVER OF HEARING

You may waive the right to a hearing. Waiver of your right to a hearing constitutes acceptance of the assessment of civil liability in the amount set forth within the Complaint. If you wish to waive your right to a hearing, an authorized person must sign the waiver form below, and send it with a cashier's check or money order for the full amount of the civil liability assessment, made payable to the **California State Water Resources Control Board, Waste Discharge Permit Fund Account**, to the address below. Please note that any settlement will not be effective until reasonable opportunity for public participation has been provided pursuant to the State Water Board's 2002 Enforcement Policy. The Water Board will notify interested persons of any proposed settlement for the recommended liability and will solicit comments on the settlement for a period of thirty (30) days.

Lahontan Water Board
Attn: Robert S. Dodds, Assistant Executive Officer
2501 Lake Tahoe Boulevard
South Lake Tahoe, CA 96150

Any settlement will not become final until after a public comment period.

Ordered by:



Robert S. Dodds
Assistant Executive Officer

Dated: October 16, 2007

Attachment "A"
Figure 1 – Aerial Map -
Barstow Wastewater Treatment Plant
and
Extent of Raw Sewage Spill
May 20 and 21, 2006



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Attachment A: Aerial Map Barstow Wastewater Treatment Plant



California Regional Water Quality Control Board Lahontan Region



Linda S. Adams
Secretary for
Environmental Protection

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www.waterboards.ca.gov/lahontan

Arnold Schwarzenegger
Governor

**WAIVER
OF RIGHT TO A
PUBLIC HEARING**

Hector Rodriguez, City Manager
City of Barstow
220 East Mountain View Street, Suite A
Barstow, CA 92311

Complaint No. R6V-2007-0026
For
Administrative Civil Liability
\$300,000

ADMINISTRATIVE CIVIL LIABILITY COMPLAINT NO. R6T-2007-0026 ISSUED TO THE CITY OF BARSTOW, FOR VIOLATION OF WASTE DISCHARGE PROHIBITIONS SPECIFIED BY THE WATER QUALITY CONTROL PLAN FOR THE LAHONTAN REGION AND VIOLATION OF BOARD ORDER NO. 6-94-26 FOR THE UNAUTHORIZED DISCHARGE OF UNTREATED WASTEWATER TO HALF WAY WASH AND THE MOJAVE RIVER, SAN BERNARDINO COUNTY, WDID NO. 6B360101001

By signing below, the City of Barstow (City) waives its right to a hearing before the California Regional Water Quality Control Board, Lahontan Region (Lahontan Water Board) with regard to the violations alleged in Complaint No. R6V-2007-0026 (the Complaint) and agrees to remit payment for the amount of the civil liability set forth above. (For payment, please make the check payable to the "California State Water Resources Control Board, Waste Discharger Permit Fund.") The City has been informed of the right provided by Water Code section 13323, subdivision (b), to a hearing within ninety (90) days of issuance of an Administrative Civil Liability (ACL) Complaint and herein waives that right.

The party signing below is a duly authorized representative of the City in connection with the Complaint. By signing below the City neither admits nor denies the allegations contained in the Complaint.

Please note that the settlement of the Complaint, as provided above, will not be effective until reasonable opportunity for public participation has been provided pursuant

to the State Water Resources Control Board 2002 Enforcement Policy (Enforcement Policy). In accordance with the Enforcement Policy, a 30-day public comment period will be required for a proposed settlement of administrative civil liability. The Lahontan Water Board will notify interested persons of any proposed settlement for the recommended liability and will solicit comments on the settlement for a period of 30 days.

During the period of public participation, which includes the 30-day comment period and a reasonable time thereafter for the Lahontan Water Board to review and evaluate any public comments received, the Lahontan Water Board retains complete discretion to terminate this settlement by withdrawing the Complaint and issuing a new ACL Complaint. This waiver is void if the Lahontan Water Board withdraws the Complaint.

Signature

Title

Date

Print your name

Send this signed form and settlement check to:
California Regional Water Quality Control Board – Lahontan Region
2501 Lake Tahoe Boulevard
South Lake Tahoe, CA 96150