

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
LAHONTAN REGION**

**MEETING OF SEPTEMBER 10 AND 11 2014  
BARSTOW**

**ITEM:** 8

**SUBJECT:** **RESCISSION OF WASTE DISCHARGE REQUIREMENTS, BOARD ORDER NO. R6V-2009-0139 FOR SIERRA SUNTOWER, LLC., SIERRA SUNTOWER GENERATING STATION, LOS ANGELES COUNTY**

**CHRONOLOGY:** December 9, 2009 Waste Discharge Requirements –  
Adopted (Board Order No. R6V-2009-0139)

**ISSUE:** Should the Regional Board rescind Waste Discharge Requirements issued to Sierra SunTower LLC., for the Class II Surface Impoundments? Rescission is appropriate because the Discharger will not be discharging process wastewater to the lined impoundments. Wastewater is being containerized on-site and trucked to a nearby wastewater treatment facility.

**DISCUSSION:** Sierra SunTower, LLC (Discharger) owns and operates a 7.5-megawatt, solar powered, electrical generating power plant on 85 acres of land in the city of Lancaster, Los Angeles County. The project uses multiple, small mirrors to track the sun with high precision and focus the sun's energy to a tower-mounted receiver (boiler). The focused heat converts the water in the boiler into steam. Steam is piped from each thermal boiler to a traditional extraction-condensing steam turbine, which powers a generator that produces electricity.

The steam that expands completely through the exhaust of the turbine is cooled and condensed by a water-cooled condenser and an evaporative mechanical draft cooling tower to condense the steam back to water and repeat the cycle back to the receivers. The process loses about one percent of the flow to cooling tower and receiver blowdown in order to maintain the required water or steam quality for the receivers and steam turbine. This blowdown, plus small amounts of reject water, a liquid designated waste, are discharged from the plant's water treatment process to above-ground baker tanks, then trucked off-site to the adjacent Sanitation Districts of Los Angeles County (LACSD), Lancaster Water Reclamation Plant (LWRP), or other nearby wastewater treatment facility.

Water Board staff has solicited comments from the Discharger and interested parties. No comments were received.

**RECOMMENDATION:** Adoption of Order as proposed.

ENCLOSURE	ITEM	BATES NUMBER
1	Proposed Board Order	8-5

# **ENCLOSURE 1**

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**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
LAHONTAN REGION**

**BOARD ORDER NO. R6V-2014-[PROPOSED]  
WDID NO. 6B190811001**

**RESCISSION OF WASTE DISCHARGE REQUIREMENTS  
BOARD ORDER NO. R6V-2009-0139**

**FOR**

**SIERRA SUNTOWER, LLC  
SIERRA SUNTOWER GENERATING STATION**

Los Angeles County

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The California Regional Water Quality Control Board, Lahontan Region (Water Board) finds:

1. Discharger

Sierra SunTower, LLC, owns and operate the Sierra SunTower Generating Station Project (Project). For the purpose of this Water Board Order (Order), Sierra SunTower, LLC, is referred to as the “Discharger.”

2. Facility

The Project consists of a 7.5-megawatt (MW) solar power generating station within 85-acres of land owned by the city of Lancaster for the purpose of generating utility electricity from solar power. The Discharger originally proposed to discharge process-wastewater, generated primarily as spent cooling water by project operations, to a double-lined, Class II Surface Impoundment equipped with a leachate collection and removal system (LCRS). The Discharger constructed the lined surface impoundments but has never discharged this wastewater to the surface impoundments. Rather, it is hauled via tanker trucks to the nearby Sanitation Districts of Los Angeles County (LACSD) Lancaster Water Reclamation Plant (LWRP), or other nearby wastewater treatment facility.

For the purposes of this Order, the Project’s Surface Impoundments are referred to as the “Facility.”

3. Project Location

The Project site is located in the western portion of Antelope Valley in the Mojave Desert at the southeast corner of the intersection of Sierra Highway and West Avenue G within the city limits of Lancaster, in Los Angeles County. The site is approximately 3 miles north-northwest of the Lancaster city center and is shown on Attachment “A,” which is made part of this Order.

4. Order History

The Water Board previously established Waste Discharge Requirements (WDRs) for Sierra Suntower, LLC., Sierra Suntower Generating Station, under Board Order No. R6V-2009-0139, adopted on December 9, 2009.

5. Reason for Action

The Discharger does not intend to use the lined surface impoundments. The Discharger intends to continue operating the Project and continue to transport process wastewater to the nearby LACSD LWRP. Therefore, it is appropriate to rescind the WDRs for this Project.

6. California Environmental Quality Act (CEQA)

This action is being taken by the Water Board to rescind WDRs issued pursuant to the California Water Code, and as such, is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, Section 21000 et seq.) in accordance with the California Code of Regulations (CCR), title 14, section 15321, subsection (a)(2).

7. Right to Petition

Any person aggrieved by this action of the Water Board may petition the State Water Board to review the action in accordance with California Water Code, section 13320, and CCR, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the internet at [http://www.waterboards.ca.gov/public\\_notices/petitions/water\\_quality](http://www.waterboards.ca.gov/public_notices/petitions/water_quality), or will be provided upon request.

8. Public Notification

The Water Board has notified the Discharger and interested agencies and persons of its intent to rescind WDRs for the Facility. The Water Board, in a public meeting, heard and considered all comments pertaining to the rescission of these WDRs.

**IT IS HEREBY ORDERED** that Board Order No. R6V-2009-0139 be rescinded:

I, Patty Kouyoumdjian, Executive Officer, do hereby verify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Lahontan Region, on September 10, 2014.

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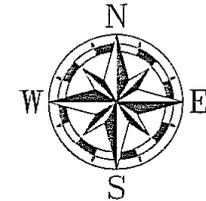
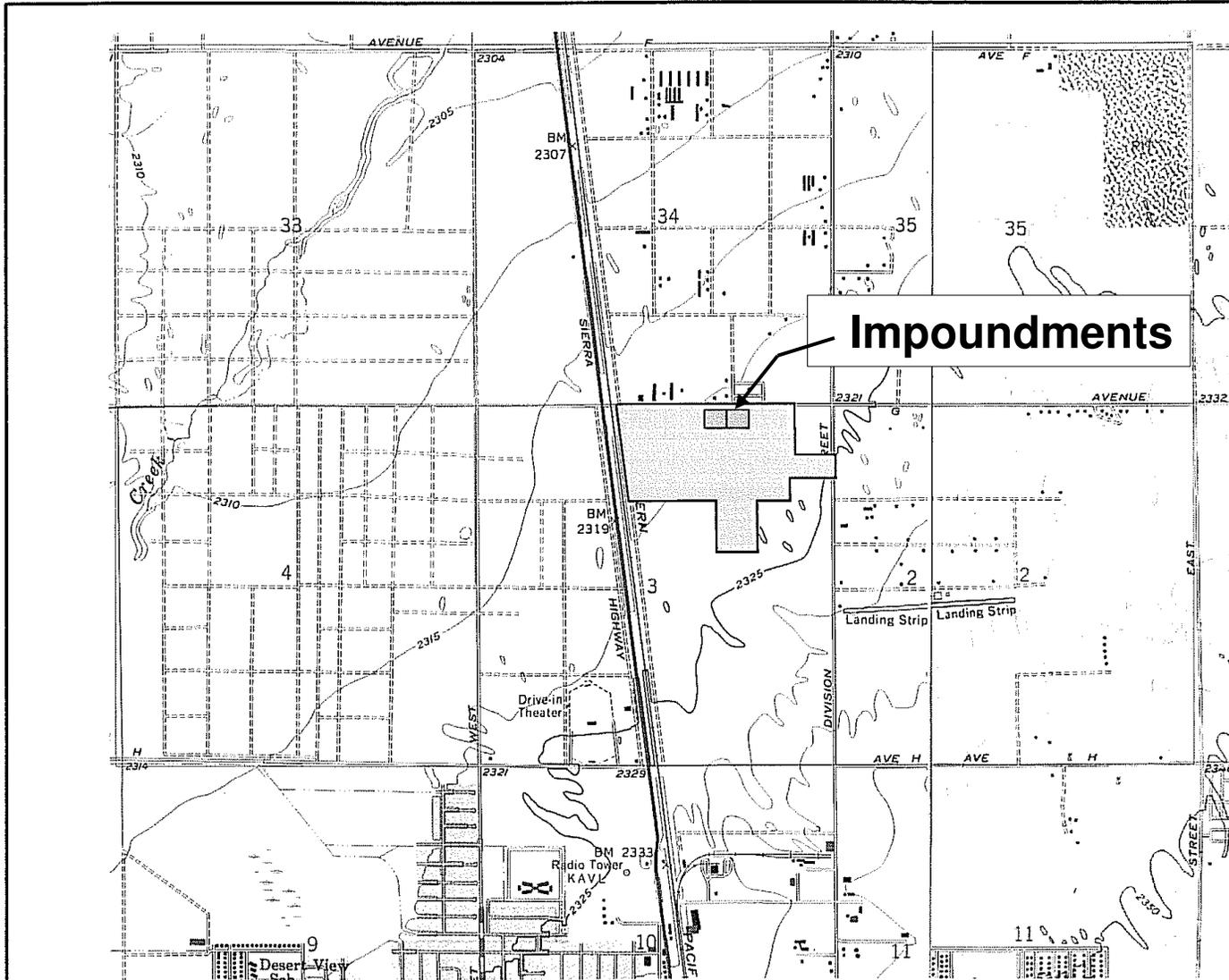
PATTY Z. KOUYOUMDJIAN  
EXECUTIVE OFFICER

Attachment: Vicinity Map

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PROPOSED

# ATTACHMENT A



Source

USGS LANCASTER EAST AND WEST  
15' QUAD SHEETS

Legend

-  EVAPORATIVE PONDS
-  PROJECT SITE