

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

**MEETING OF FEBRUARY 11, 2015  
APPLE VALLEY, CALIFORNIA**

**ITEM:** 4

**SUBJECT:** **AMENDED WASTE DISCHARGE REQUIREMENTS -  
BOARD ORDER NO. R6V-2006-0025 FOR U.S. BORAX,  
INC., MOJAVE COGENERATION COMPANY, CLEAN  
ENERGY FUELS COMPANY, BORON FACILITY, KERN  
COUNTY**

**CHRONOLOGY:**

April 11, 2001	Revised Waste Discharge Requirements – Adopted (Board Order No. 6-01-19)
June 14, 2006	Revised Waste Discharge Requirements – Adopted (Board Order No. R6V-2006-0025)
January 16, 2013	Amended Waste Discharge Requirements – Adopted (Board Order No. R6V-2006-0025A1)

**ISSUE:** Should the Water Board adopt Amended Waste Discharge Requirements to increase capacity of Boric Acid Ponds (BAP) 1 through 5 at the Boron Mine?

**DISCUSSION:** U.S. Borax, Inc. (Discharger) owns and operates a borate mine, a sodium borate refinery, a boric acid plant, a Spray Dry process, and a Zinc Borate process. The borate mine, sodium borate refinery, boric acid plant, surface impoundments used for waste disposal, and the ten inactive Waste Management Units are referred to as the Facility. The borate mine consists of an open-pit. The Facility is located in the City of Boron in Kern County.

Boric Acid Ponds (BAPs) 1 through 6 are surface impoundments that hold Group A and Group B mining wastes. Currently, BAPs 1 through 5 are approaching full capacity and BAP 6 is being dewatered to allow for repairs to be made to the liner system. In order for the Discharger to continue operating normally, expansion of the BAPs is

critical. The Discharger is proposing to expand the capacity of BAPs 1 through 5 by extending the existing liner system. The existing Order limits the capacity of BAPs 1 through 5; by amending the WDRs, the Discharger gains an additional 619 million gallons of capacity in the existing BAPs. The WDRs are being amended to allow the Discharger to expand the capacities and surface areas of BAPs 1 through 5, amending Board Order No. R6V-2006-0025. Water Board staff have evaluated the design and quality control plans and conclude the proposed expansion is protective of water quality.

Water Board staff has solicited comments from the Discharger and interested parties. All comments received have been addressed.

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

<b>ENCLOSURE</b>	<b>ITEM</b>	<b>BATE NUMBER</b>
1.	Board Order No. R6V-2006-0025A2 (Proposed)	4-5

# **ENCLOSURE 1**

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

**BOARD ORDER NO. R6V-2006-0025A2 (PROPOSED)  
WDID NO. 6B152004001**

**AMENDED WASTE DISCHARGE REQUIREMENTS  
FOR**

**U.S. BORAX, INC., THE MOJAVE COGENERATION COMPANY, CLEAN ENERGY FUELS  
COMPANY, BORON FACILITY**

\_\_\_\_\_Kern County\_\_\_\_\_

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

1. Discharger

On December 8, 2010, August 11 and 19, 2011, May 21, 2012, November 12 and 26, 2014, U.S. Borax, Inc. submitted information that collectively constitutes a complete amended Report of Waste Discharge (RWD) to support a proposed amendment to Waste Discharge Requirements (WDRs), Board Order No. R6V-2006-0025. U.S. Borax, Inc. is a wholly owned subsidiary of Rio Tinto. U.S. Borax, Inc. owns and operates the U.S. Borax Mine in Boron, California. U.S. Borax, Inc., Mojave Cogeneration Company (MCC)<sup>1</sup> and Clean Energy Fuels Company (CEFC)<sup>2</sup> are hereinafter collectively referred to as the "Discharger." The Discharger submitted an amended RWD for proposed changes in waste discharges by adding more capacity to existing boric acid surface impoundments at the Boron facility.

2. Reasons for Action

The Discharger is proposing to expand the capacity of Boric Acid Ponds (BAPs) 1 through 5. Board Order No. R6V-2006-0025, Finding 11, Table 2, describes the Group A surface impoundments known as BAPs 1 through 5. WDRs are being amended to allow the Discharger to increase the size and capacity of BAPs 1 through 5. While the design features that protect water quality will not change, a change in the Board Order is required when there is a material change. California Code of Regulations (CCR), title 23, section 2210, defines a "material change" as an "increase in area or depth to be used for solid waste disposal beyond that specified in the waste discharge requirements." Therefore, an amendment of the Board Order to allow for an increase in surface area and capacity of the BAPs is necessary.

3. California Environmental Quality Act Compliance

The California Environmental Quality Act (CEQA) applies to projects that have the potential for causing a significant effect on the environment. As required by the State CEQA Guidelines, Section 15090, the Kern County Board of Supervisors certified an

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1 MCC, an independent energy producer, operates a cogeneration plant at the site that produces softener effluent and cooling tower blowdown water.  
2 CEFC, an independent clean energy producer, operates a Liquid Natural Gas (LNG) plant at the site. The LNG plant produces a waste stream of cooling tower blowdown water.

Environmental Impact Report (EIR) for this facility on January 9, 2004. The EIR evaluated the potential impacts from the BAPs, but did not specify their specific location or capacity. Engineered design features that included construction of pond liner systems were required in Board Order No. R6V-2006-0025 to mitigate potential water quality impacts to groundwater from operation of the BAPs. Because the expansion will still be within the project area analyzed in the EIR, and there is no proposed change to the design features, a supplement or subsequent EIR is not required. Based on the analysis of the EIR and the engineered design features that include an extension of the pond liner system, the Water Board finds that the project will not have a significant effect on water quality and will file a Notice of Exemption within five days from the issuance of this Order.

4. Notice to Interested Parties and Public

The Water Board has notified the Discharger and all known interested parties and persons of its intent to issue amended WDRs for the Facility.

5. Consideration of Comments

The Water Board, in a public meeting, heard and considered all comments pertaining to the discharges.

**IT IS HEREBY ORDERED** that the Discharger shall comply with the following amended requirements:

1. Add the following to Finding No. 11, Board Order No. R6V-2006-0025, as amended:

BAPs 1 through 5 are currently in operation, but are approaching full capacity. The Discharger cannot continue to operate for much longer without additional discharge capacity. The Discharger will utilize the area by expanding the existing liner systems at the same slope. BAPs 1 through 5 will be closed as landfills, and the increased volume that ultimately will be discharged is a material change as defined in CCR, title 23, section 2210. Pursuant to California Water Code, sections 13260, subdivision (c) and 13263, the use of the additional capacity must be approved in WDRs.

This Board Order approves the change in capacity and surface area as represented in the Design Report for BAPs 1 through 5, prepared by HATCH, and submitted as part of the amended ROWD.

**Table 2A: Capacity, Surface Area, and Age of Waste Management Units**

Waste Management Unit No.	Current Status	Capacity (x10 <sup>6</sup> gal)	Surface Area (acres)	Year On Line	Year Off Line	Authorized to Receive Mining Waste
Former Pond 1	Inactive	431	75	1956	1969	Group A
Former Pond 2	Inactive	437	51	1967	1975	Group A
Former Pond 3	Inactive	359	32	1970	1975	Group A
Former Ponds	All five		81 (all 5)	1972	1988	Group A

A-E (5 total)	inactive					
Former Pond 4	Inactive	455	83	1975	1990	Group A
Former Pond 5	Inactive	1,466	127	1976	1994	Group A
Pond 6	Active	728	120	1980		Group A
Ponds R1-R6	Active	294	120	1984		Group A&B
BAP 1	Active	298	32.1	1998		Group A&B
BAP 2	Active	311	32.1	1998		Group A&B
BAP 3	Active	313	32.1	1998		Group A&B
BAP 4	Active	314	32.2	2004		Group A&B
BAP 5	Active	523	39.3	2006		Group A&B
BAP 6	Active	372	33.5	2012		Group A&B
BAP 7	Proposed	228 (proposed)	70 (proposed)	2014 (proposed)		Group A&B
Pit Ponds	Active	Variable	Variable	1994		Group C
Domestic wastewater evaporation ponds		36	16	2004		Unclassified
Final Mine Pit			Variable	2001		Unclassified

2. Board Order No. R6V-2006-0025, Section I. Discharge Specifications, D. General Requirements 7, is amended to read as follows:

Within 90 days following completion of construction of any new or expanded surface impoundment, a technical report shall be submitted containing as-built drawings and a quality assurance/quality control construction report for any newly constructed or expanded surface impoundment. The report shall contain all field and laboratory data generated during construction of the surface impoundment. The report shall also contain certification, signed by a California registered civil engineer, that the surface impoundment was constructed and is suitable for operation in accordance with Title 27 for Group A and B mining waste.

I, Patty Z. Kouyoumdjian, Executive Officer, do hereby certify 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 February 11, 2015.

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PATTY Z. KOUYOUMDJIAN  
 EXECUTIVE OFFICER

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