CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION

BOARD ORDER NO. R6V-2006-0025A1
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 March 14, June 6, and August 27, 2012, 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)[1] and Clean Energy Fuels Company (CEFC)[2] are hereinafter collectively referred to as the "Discharger." U.S. Borax, Inc. submitted an amended Report of Waste Discharge (RWD) for proposed changes in waste discharges by adding more capacity to existing boric acid surface impoundments at the Boron Facility.

2. Reason for Action

Board Order No. R6V-2006-0025, Finding 11, Table 2, describes the capacity of a then-proposed Group A surface impoundment known as Boric Acid Pond (BAP) 6 as 228 million gallons and having a surface area of 35 acres. During final design, U.S. Borax built BAP 6 to the prescribed design, but with a larger capacity of 372 million gallons. The changes to the WDR reflect that larger capacity and correct the acreage from 35 to 33.5 acres. Waste Discharge Requirements (WDRs) are being amended to allow the Discharger to utilize the full capacity volume of BAP 6, amending Board Order No. R6V-2006-0025, Finding No. 11, Table 2.

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.

3. California Environmental Quality Act (CEQA) Compliance

The current action of changing the WDR to reflect the actual constructed size of BAP 6 is covered by the general rule that CEQA applies only to projects which have the potential for causing a significant effect on the environment. The Board of Supervisors of the County of Kern certified, as required by Section 15090 of the State CEQA Guidelines, an Environmental Impact Report (EIR) for the Facility on January 9, 2004. The U.S. Borax Life of Mine Project EIR evaluated the expansion of the existing surface mining operation, which included the overall area of the Boric Acid Ponds and development of a reclamation plan. Adopted mitigation measures for impacts to groundwater from operation of the proposed Boric Acid Ponds were included as part of the Board Order No. R6V-2006-0025, and consisted of engineered design features that included construction of pond liner systems. The design features of the proposed Boric Acid Ponds reduce the effects of the Boric Acid Ponds on groundwater to less than significant. It can, therefore, be seen with certainty that there is no possibility changing the WDR to reflect the size of the fully-lined BAP 6 that was constructed would have a significant effect on the environment, and the activity is not subject to CEQA. The proposed changes to the WDR will not affect the effectiveness of the mitigation, and groundwater will still be protected. The Water Board 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, Order No. R6V-2006-0025, as amended:

> As of March 14, 2012, Boric Acid Ponds (BAP) 1-7 consist of six active surface impoundments and one proposed surface impoundment, for a combined total area of 258.5 acres. The proposed BAP will be constructed similar to the existing BAP using liners and leachate collections systems. The Proposed BAP will be constructed using a double liner system consisting of (from top to bottom) a geosynthetic 60-mil liner; synthetic geonet with an LCRS; a second 60- mil liner above a lower LCRS system; all supported on compacted clay. The BAP contain Group B mining waste effluent discharged from the BAP plant, liquid extracted from tailings in Pond 6, and Group A mining waste transferred from Pond R1-R6. BAP 1-7 are permitted to contain Group A and B mining

waste effluent. The wastewater in BAP 1-7 contains an average of 111 mg/L arsenic, 19 mg/L antimony, and 90,860 mg/L TDS.

In July and November 2005, the Discharger submitted a revised ROWD for additional surface impoundments, BAP 5, 6, and 7. The plans included proposed surface areas and capacities. During final design of BAP 6, the capacity was expanded, though conceptual design and the liner system did not change. BAP 6 is currently in operation, but the Discharger cannot utilize the full capacity of the surface impoundment as built, and the use is restricted to the volume stated in Table 2 in Finding 11 of Board Order No. R6V-2006-0025. BAP 6 is being closed as a landfill, and the increased volume that ultimately will be discharged is a material change as defined in the California Code of Regulations (CCR), title 23, section 2210, and pursuant to California Water Code, sections 13260, subdivision (c) and 13263, the use of the additional capacity must be approved in WDRs.

This Order approves the change in capacity and surface area as represented in as-builts for BAP 6, as presented in the Final Construction Quality Assurance Summary Report, prepared by AMEC, and submitted as part of the amended ROWD on March 14, 2012.

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

Waste Management Unit No.	Current Status	Capacity ($x10^6$ 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 A-E (5 total)	All five inactive		81 (all 5)	1972	1988	Group A
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
Pond R1-R6	Active	294	120	1984		Group A&B
BAP 1	Active	228	30	1998		Group A&B
BAP 2	Active	228	30	1998		Group A&B
BAP 3	Active	228	30	1998		Group A&B
BAP 4	Active	228	30	2004		Group A&B
BAP 5	Active	228	35	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

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 Board, Lahontan Region, on January 16, 2013.

PATTY Z. KOUYOUMDJIAN
EXECUTIVE OFFICER

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