



California Regional Water Quality Control Board

San Diego Region



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Linda S. Adams

Secretary for
Environmental Protection

Arnold Schwarzenegger
Governor

August 31, 2009

Mr. Steve Castaneda
Ms. Pamela Bensoussan
Councilmembers
Chula Vista Mayor and Council Office
276 Fourth Avenue
Chula Vista, CA 91910

In reply refer to:

257829: DBarker

WDID: 9 00000091

Dear Mr. Castaneda and Ms. Bensoussan:

Subject: NPDES PERMIT APPLICATION FOR RENEWAL OF NPDES WASTE DISCHARGE REQUIREMENTS FOR ORDER NO. R9-2004-0154, NPDES NO. CA0001368, DYNEGY SOUTH BAY, LLC, SOUTH BAY POWER PLANT DISCHARGE TO SAN DIEGO BAY

The San Diego Regional Water Quality Control Board (Regional Water Board) received your June 16, 2009 letter and the August 14, 2009 letter cosigned by you, Cheryl Cox, Mayor, and Rudy Ramirez, Deputy Mayor. The June 16 and August 14 letters expressed your joint concerns and opposition to the San Diego Regional Water Board's plan to administratively extend the term of the current National Pollution Discharge Elimination System (NPDES) Order No. R9-2004-0154 for Dynegy's South Bay Power Plant for up to five years upon its expiration on November 10, 2009.

I am appreciative of your concerns regarding both the administrative extension as well as the reissuance of NPDES requirements to Dynegy's South Bay Power Plant for another 5-year permit term in view of the various adverse effects attributable to the power plant cooling water discharge described in your letters. Your letter also made reference to the upcoming termination of the lease agreement between the Port of San Diego and Dynegy South Bay LLC to operate the South Bay Power Plant at its current location in the City of Chula Vista. Your comments indicated that the Regional Water Board should not reissue the current NPDES permit because at the time the current permit was adopted it was understood that the South Bay Power Plant would 1) not continue operating beyond the term of its current lease which is set to expire in November, 2009 and 2) be replaced with alternate power generation sources such as the new Otay Mesa Generating Station.

Dynegy leases both the site property and the power generating facilities located on the site from the Port of San Diego under a lease agreement that expires in November 2009. Thereafter, a 3-month period is designated in the lease during which time the

California Environmental Protection Agency

“must run” status of the power plant will be evaluated by California Independent System Operator (CAISO). If at the end of that period the power plant is considered by CAISO to be a “Reliability Must Run (RMR)” facility needed to meet the State’s critical power needs, the lease will continue in effect until that status is terminated. If the CAISO determines that the power plant is no longer a RMR facility, Dynegy is obligated to demolish the plant unless the Port waives this requirement. If the CAISO classifies the power plant as a RMR facility, then all or some of the power generating units at the facility will need to remain available for electrical energy generation. We understand that a team at Dynegy has been working for over a year with the Port of San Diego in developing plans and preparations on the eventual shut down and demolition of the South Bay Power Plant, once RMR status has been removed and operations have stopped. Dynegy reports that these plans and preparations are ongoing so that Dynegy will be prepared to implement them once the CAISO makes their decisions on the need for continued operation of the power plant.

At the time the current NPDES permit for South Bay Power Plant permit was adopted in 2004, the former facility operator, Duke Energy South Bay, LLC indicated that it had no plans to continue operating the existing South Bay Power Plant facility or replace it with newer equipment after November 2009. However, in April 2007, Dynegy assumed responsibility for the operation of the facility as well as the terms of the lease. Because the current NPDES permit is set to expire on November 10, 2009, Dynegy filed a complete application for reissuance of the NPDES permit in accordance with the provisions of the permit. Dynegy is presumably planning to continue to operate the facility for some period to come after the November 10 permit expiration date. The Regional Water Board is not a party to an agreement with any other party regarding the site lease, the continued siting of the South Bay Power Plant facilities at its current location, or the schedule for retirement of the South Bay Power Plant. These issues extend beyond the jurisdiction of the Regional Water Board and any agreements between other parties regarding these issues would not be legally binding on the Regional Water Board. Moreover the Regional Water Board has not entered into an agreement with any party regarding any limitation or contingency on future NPDES permit reissuances for the South Bay Power Plant.

The Regional Water Board is well aware that the South Bay Power Plant discharge presents a considerable and chronic stressor to the aquatic ecosystem of south San Diego Bay. The adverse effects attributable to the power plant discharge are well documented in the current NPDES permit and the Regional Water Board will fully consider them again in the NPDES permit reissuance process. The degradation of aquatic life attributable to the South Bay Power plant discharge is not unique and is comparable to the degradation effects seen at other coastal power plants in the San Diego Region and throughout California. Due to these similarities as well as the reasons discussed below, it is important that the San Diego Regional Water Board initiate the NPDES reissuance proceedings in concert with the State Water Resources Control Board’s (State Water Board) pending adoption of a statewide policy establishing uniform, technology-based performance standards for power plant cooling water intake structures.

The South Bay Power Plant is one of 19 power plants in California that are currently permitted to withdraw water from the ocean, bays, or estuaries for electrical energy production using a single-pass system, also known as once-through cooling (OTC). OTC power plants are generally the largest volume dischargers in the State due to their high use of OTC water. OTC can cause adverse impacts when aquatic organisms are trapped against a facility's intake screens (impinged) and cannot escape, or when they suffer contact injuries that increase mortality. Likewise, smaller organisms, such as larvae and eggs, can be drawn through a facility's entire cooling system (entrained) and subjected to adverse effects due to rapid pressure changes, chemical treatment systems, and violent sheering forces, and ultimately discharged in heated facility wastewaters. The harmful "impingement" and "entrainment" effects associated with OTC water intake structures are among the most critical aspects of the power plant discharge that will be addressed by the South Bay Power Plant NPDES reissuance.

The federal Clean Water Act (CWA) addresses OTC's adverse impacts in Section 316(b) which mandates technology-based measures to minimize adverse environmental impacts from cooling water intake structures. As the agency authorized to implement Section 316(b) requirements, the US Environmental Protection Agency (USEPA) has made repeated efforts over the past 30 years to develop national regulations that would establish uniform performance standards for incorporation in NPDES permits for facilities using cooling water. USEPA's attempts have been subjected to repeated legal challenges by both environmental and industrial petitioners and court remands. In its most recent effort, the USEPA adopted new cooling water intake regulations in July, 2004 known as the Phase II rule establishing uniform performance standards for large existing power plants. Following legal challenges by environmental and industrial petitioners the federal Second Circuit Court of Appeals issued a decision on the Phase II rule in January, 2007. The Second Circuit Court decision, known as the Riverkeeper II decision, remanded several significant provisions of the Phase II rule to USEPA for further clarification while ruling other portions as "impermissible constructions of the statute." The major remanded provisions included USEPA's determination of Best Technology Available (BTA), the performance standard ranges, the site-specific BTA alternatives based on cost considerations, and the restoration provisions.

Although it is likely that USEPA will move forward and address the necessary changes required by the Second Circuit's remand in Riverkeeper II, it is unclear when such changes will be issued or what form they will take. Given the length of time required to develop and promulgate the initial Phase II rule (Phase II was first proposed in 2002), it may take several more years before a draft rule is proposed by USEPA for public comment and ultimately finalized. Any litigation would only extend that time frame even further, followed by an implementation process of several more years.

USEPA has directed NPDES permitting authorities to implement CWA Section 316(b) requirements for existing facilities using best professional judgment (BPJ) for the interim period while it addresses the necessary changes required by the Second Circuit's

remand in Riverkeeper II. USEPA 's guidance for permitting authorities to use the BPJ approach when re-issuing NPDES permits for power plants has been in place since 1977. The effectiveness of this approach in California, however, has been decidedly mixed. The question of how to address OTC impacts is complex and requires significant resources to evaluate the intertwined technical and biological issues that comprise a BPJ analysis. The case-by-case BPJ determinations are costly labor-intensive efforts that have required a significant resource investment by each Regional Water Board to properly consider the different biological, engineering, logistical, and economic issues that comprise a full and complete analysis. The expertise required in these areas is highly specialized and not always immediately available to a Regional Water Board with limited resources devoted to power plant issues. The BPJ approach has led to varying decision criteria and different conclusions regarding the most appropriate technology-based solutions needed to address OTC impacts attributable to power plant discharges. The BPJ approach has also led to significant inconsistencies and inadequacies in permit requirements between Regional Water Boards.

Some of the NPDES permits for coastal plants in California, absent a firm USEPA national policy standard on which to base the requirements for OTC impacts, have been challenged repeatedly by industrial and citizen petitioners, resulting in lengthy administrative extensions well beyond the standard five year NPDES permit term. Still other NPDES permits were delayed when it appeared likely USEPA would adopt a sustainable Phase II rule. The result is a significant backlog in reissuing most of the State's NPDES permits for coastal power plant facilities. In fact nearly all of California's 19 coastal OTC power plants currently operate with administratively extended NPDES permits. The Regional Water Boards are deferring the NPDES permit reissuances for coastal power plants within their respective jurisdiction pending the adoption of a state policy or federal regulation implementing CWA Section 316(b) for existing power plant facilities.

In order to address the issues caused by the lack of USEPA national OTC performance standards, the State Water Board initiated development of a statewide policy in 2005 to establish uniform, technology-based performance standards to implement CWA Section 316(b) and reduce the harmful effects associated with cooling water intake structures on marine and estuarine life. The State Water Board is well into the process of developing the Policy and recently issued a notice of public hearing to receive comments on the draft Policy at a hearing in Sacramento on September 16, 2009. The Notice of Public Hearing, the draft Policy, and the Substitute Environmental Document may be viewed at the State Water Board's website at http://www.waterboards.ca.gov/water_issues/programs/npdes/cwa316.shtml .

If adopted as drafted, the statewide Policy will effectively resolve the long-standing aforementioned inconsistencies in implementation of CWA Section 316(b) technology-based requirements addressing OTC impacts and lessen the considerable permitting and resource burden associated with the BPJ process. Another key feature of the draft Policy is that it contains an implementation plan that addresses potential effects to the State's electrical generation and transmission system while simultaneously coordinating

the efforts of the State and Regional Water Boards to address adverse impacts from OTC systems. The proposed compliance dates contained in the draft Policy were developed considering a report produced by the energy agencies (California Energy Commission California Public Utilities Commission, and California Independent Systems Operator) titled "Implementation of Once-through Cooling Mitigation Through Energy Infrastructure Planning and Procurement Changes", and the accompanying table, titled "Draft Infrastructure Replacement Milestones and Compliance Dates for Existing Power Plants in California Using Once-Through Cooling". The energy agencies' approach seeks to address the replacement, repowering, or retirement of power plants currently using OTC in a manner that (1) maintains reliability of the electric system; (2) meets California's environmental policy goals; and (3) achieves these goals through effective long term planning for transmission, generation and demand resources.

The draft Policy, if adopted, will significantly impact the NPDES requirements at the South Bay Power Plant related to OTC impacts. Proceeding with the South Bay Power Plant NPDES permit reissuance in advance of the State Water Board's adoption of the Policy, and Dynegy's submittal of additional information needed to implement the Policy, would put a significant permitting burden on the Regional Water Board during a time of increasingly severe resource constraints and contribute to the continued inconsistency in implementation of CWA Section 316(b) technology-based requirements at coastal power plants that contribute to the statewide power grid. It would also significantly limit the Regional Water Boards' ability to address concerns that extend beyond its jurisdiction or affect non-water-related issues, such as power plant air emissions, facility site location, and the schedule for replacement, repowering, or retirement of South Bay Power Plant.

For all these reasons, the proper course for the Regional Water Board at this time is to defer the reissuance of the current NPDES permit until the State Water Board adopts the Policy and Dynegy submits the information required to implement the Policy. Dynegy has satisfied the legal requirements for an administrative extension of its current NPDES permit by submitting a timely and complete application for the reissuance of the current South Bay Power Plant NPDES permit. Under this approach Dynegy's current NPDES permit (Order No. R9-2004-0154) will remain fully effective and enforceable after its five year term expires on November 10, 2009 until such time as it is superseded by a new reissued NPDES permit, or other Order, or the expiration of five additional years, whichever occurs first. By letter dated July 20, 2009, I have informed Dynegy that the Regional Water Board is deferring the NPDES reissuance at this time, including development of a draft NPDES permit, until the State Water Board adopts the Policy and Dynegy submits the information required to implement the Policy.

A non-action information agenda item will be conducted at the Regional Water Board regularly scheduled meeting on September 9, 2009 to discuss the continued operation of the South Bay Power Plant as it relates to the State Water Board's draft Policy and the appropriate timing for the Board to initiate the NPDES reissuance proceedings. The Board meeting begins at 9:00 am will be held at the following location:

Mr. Steve Castaneda
Ms. Pamela Bensoussan
Councilmembers
City of Chula Vista

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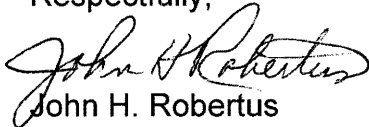
August 31, 2009

San Diego Regional Water Quality Control Board
Regional Water Board Meeting Room
9174 Sky Park Court
San Diego, California 92123

You or your representatives may wish to attend the September 9 meeting to express your concerns to the Regional Water Board members on this matter.

In the subject line of any response, please include the requested "In reply refer to:" information located in the heading of this letter. For questions pertaining to the subject matter, please contact David Barker at (858) 467-2989 or by e-mail at dbarker@waterboards.ca.gov.

Respectfully,


John H. Robertus
Executive Officer

cc:

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Mr. Steve Castaneda
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August 31, 2009

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Order No.	R9-2004-0154
File No.	13-0091
GeoTracker No.	
NPDES No.	CA0001368
CIWQS Place ID	257829
WDID	9 000000091
Reg. Measure No.	133117
Party ID	
Person ID	