

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION**

TENTATIVE CEASE AND DESIST ORDER NO. R2-2008-XXXX

**REQUIRING DOW CHEMICAL COMPANY
TO CEASE AND DESIST DISCHARGING WASTEWATER IN VIOLATION OF
REQUIREMENTS TO WATERS OF THE STATE**

WHEREAS the California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter "Regional Water Board"), finds that:

1. Dow Chemical Company (hereinafter "Discharger") conducts chemical research and manufactures agricultural chemicals, fumigants, fungicides, carbon tetrachloride, hydrochloric acid, and latex at its facility at 901 Loveridge Road in northern Pittsburg, CA. The Discharger treats raw water from New York Slough (approximately 1 MGD at maximum flow) and power plant boiler and cooling tower blowdown (approximately 0.06 MGD) for use in its manufacturing operations. The treatment system consists of clarification, filtration, pH adjustment, and reverse osmosis. About half of the flow (0.52 MGD at maximum flow) goes completely through the treatment system and is used in the Discharger's manufacturing operations. The other half (0.54 MGD at maximum flow) is used to backwash the filtration and reverse osmosis units and the resulting brine is discharged to New York Slough. The average discharge rate is about 0.24 MGD.
2. The wastewater discharge has been regulated by waste discharge requirements in Order No. 01-142 (NPDES Permit No. CA0004910).
3. Concurrent with the adoption of this Cease and Desist Order, the Regional Water Board adopted Order No. R2-2008-XXXX (hereinafter "Permit"), reissuing waste discharge requirements for the Discharger. The Permit contains prohibitions, limitations, and provisions regulating the discharge. The limitations for cyanide are 2.6 µg/L average monthly effluent limit and 6.4 µg/L maximum daily effluent limit.
4. As stated in the Permit findings, the 95th percentile of the cyanide data exceeds the average monthly limit in the permit. Therefore, the Discharger threatens to violate the effluent limitations for cyanide.
5. Water Code § 13301 authorizes the Regional Water Board to issue a Cease and Desist Order when it finds that a waste discharge is taking place, or threatening to take place, in violation of Regional Water Board requirements.
6. Because the Discharger will violate or threaten to violate required effluent limits, this Order is necessary to ensure that the Discharger achieves compliance. This Order establishes time schedules for the Discharger to complete necessary investigative, preventive, and remedial actions to address its imminent and threatened violations.

7. The time schedules in this Order are parameter-specific and intended to be as short as possible. They account for the considerable uncertainty in determining effective measures (e.g., pollution prevention and treatment plant upgrades) necessary to achieve compliance. This Order allows some time to first explore source control measures before requiring further actions, such as treatment plant upgrades, which are likely to be much more costly. The time schedules are based on reasonably expected times needed to implement source identification and upstream source control, evaluate success, identify on-site treatment alternatives if necessary, test and select from among alternatives, and construct plant upgrades. The Regional Water Board may wish to revisit these assumptions as more information becomes available.
8. As part of the time schedules to achieve compliance, this Order requires the Discharger to comply with interim effluent limits, where feasible. These interim limits are intended to ensure that the Discharger maintains at least its existing performance while completing all tasks required during the time schedules. The interim limits are based on past performance or limits in previous orders, whichever are more stringent. If based on past performance, the interim limits represent the 99.87th percentile of actual measured discharge concentrations (three standard deviations from the mean). If insufficient monitoring data exist to derive a reliable performance-based limit, and if no previous order contained a limit, then this Order does not establish an interim limit.
9. This Order is an enforcement action and, as such, is exempt from the provisions of the California Environmental Quality Act (Public Resources Code § 21000 et seq.) in accordance with 14 CCR § 15321.
10. The Regional Water Board notified the Discharger and interested persons of its intent to consider adoption of this Cease and Desist Order, and provided an opportunity to submit written comments and appear at a public hearing. The Regional Water Board, in a public hearing, heard and considered all comments.

IT IS HEREBY ORDERED, in accordance with Water Code § 13301, that the Discharger shall cease and desist from discharging and threatening to discharge wastes in violation of its Permit by complying with the following provisions:

1. Prescribed Actions. The Discharger shall comply with the required actions in Table 1 in accordance with the time schedules provided therein to comply with all effluent limits contained in the Permit. All deliverables listed in Table 1 shall be acceptable to the Executive Officer, who will review them for adequacy and compliance with the Table 1 requirements. The Discharger shall further implement all actions set forth in each deliverable, unless the Executive Officer finds the deliverable to be unacceptable.

2. Exceptions. The cyanide-related time schedule and prescribed actions (Table 1) shall cease to be in effect upon the effective date of site-specific objectives¹ for cyanide in San Francisco Bay resulting in an adjusted saltwater chronic objective of 2.9 µg/L and acute objective of 9.4 µg/L, and thus putting into effect the alternate effluent limits the Permit specifies. If different site-specific objectives are adopted, the Regional Water Board will establish revised effluent limits based on them after the effective date of those different site-specific objectives, and the cyanide-related time schedules and prescribed actions in this Order shall remain in effect until the revised cyanide limits are adopted. At that time, the Regional Water Board will determine if the cyanide-related time schedules and prescribed actions in Table 2 are still necessary or if they should be rescinded. Until such time, the Discharger shall comply with them.
3. Reporting Delays. If the Discharger is delayed, interrupted, or prevented from meeting one or more of the time schedules in Table 2 due to circumstances beyond its reasonable control, the Discharger shall promptly notify the Executive Officer, provide the reasons and justification for the delay, and propose time schedules for resolving the delay.
4. Consequences of Non-Compliance. If the Discharger fails to comply with the provisions of this Order, the Executive Officer is authorized to take further enforcement action or to request the Attorney General to take appropriate actions against the Discharger in accordance with Water Code §§ 13331, 13350, 13385, and 13386. Such actions may include injunctive and civil remedies, if appropriate, or the issuance of an Administrative Civil Liability Complaint for Regional Water Board consideration.
5. Effective Date. This Order shall be effective on the effective date of the Permit.

I, Bruce H. Wolfe, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on _____, 2008.

BRUCE H. WOLFE
Executive Officer

¹ In December 2006, the Regional Water Board adopted site specific objectives for cyanide in San Francisco Bay.

Table 1: Time Schedule and Prescribed Actions for Effluent Limitations

Action	Deadline
a. Comply with the following interim effluent limits at Monitoring Station E-001: <i>Cyanide</i> : Max. daily effluent limit = 6.4 µg/L	Upon the effective date of this Order
b. Investigate sample collection, sample handling, and analytical laboratory quality assurance and quality control practices to ensure that analytical results for cyanide are accurately determined and reported. Submit a report by the deadline describing the results of the investigation and any changes in quality assurance and quality control practices implemented.	September 1, 2008
c. If discharge data continue to show the discharge is out of compliance (as defined in Section 2.4.5 of the State Implementation Policy) with the permit effluent limits, submit a plan for identifying all sources of cyanide. The plan shall, at a minimum, include sampling influent source water, and any other potential sources of cyanide.	February 1, 2009
d. Implement the plan developed in action "c" within 30 days of the deadline for action "c," and submit by the deadline for this action a report that contains an inventory of the pollutant sources.	June 1, 2009
e. Submit a report documenting development and initial implementation of a program to reduce and prevent the pollutants of concern in the discharge. The program shall consist, at a minimum, of the following elements: i. Maintain a list of sources of pollutants of concern. ii. Investigate each source to assess the need to include it in the program. iii. Identify and implement targeted actions to reduce or eliminate pollutants of concern.	August 1, 2009
f. Continue to implement the program described in action "c" and submit annual status reports that evaluate its effectiveness and summarize planned changes. Report whether the program has successfully brought the discharge into compliance with the effluent limits in the Permit. If not, identify and implement additional measures to further reduce discharges.	Annually each February 28 in Best Management Practices and Pollutant Minimization Report required by Permit Provision VI.C.3

Action	Deadline
<p>g. If discharge data continue to show the discharge is out of compliance (as defined in Section 2.4.5 of the State Implementation Policy) with the permit effluent limits, submit a report, by the deadline for this action, identifying more aggressive actions to ensure compliance. These actions shall include, but not be limited to, reviewing options for upgrades to the treatment plant. The report shall identify an implementation schedule for investigating these options, selecting a preferred option, and implementing the chosen option. At a minimum, the report shall plan for the following activities:</p> <ul style="list-style-type: none"> i. Bench scale testing or pilot scale testing or both ii. Development of preliminary design specifications iii. Development of final design specifications iv. Procurement of funding v. Acquisition of necessary permits and approvals vi. Construction 	<p style="text-align: center;">June 1, 2012</p>
<p>h. Implement the plan required in action “g” within 45 days of the deadline for action “g,” and submit annual status reports.</p>	<p style="text-align: center;">Annually each February 1 in Annual Self-Monitoring Report required by Permit Attachment E, Monitoring and Reporting Program</p>
<p>i. Submit documentation confirming complete plan implementation and comply with effluent limits in the Permit.</p>	<p style="text-align: center;">April 1, 2018</p>