CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER NO. R5-2005-___

NPDES NO. CA0004057

MONITORING AND REPORTING PROGRAM
FOR
FORMICA CORPORATION
SIERRA PLANT
PLACER COUNTY

This Monitoring and Reporting Program is issued pursuant to California Water Code Sections 13383 and 13267. The Discharger shall not implement any changes to this Program unless and until the Regional Board or Executive Officer issues a revised Monitoring and Reporting Program. Specific sample station locations shall be established under direction of the Regional Board's staff, and a description of the stations shall be attached to this Order.

Section 13267 of the California Water Code states, in part, "*(a) A regional board, in establishing…waste discharge requirements…may investigate the quality of any waters of the state within its region"* and *"(b)(1) In conducting an investigation…, the regional board may require that any person who… discharges… waste… that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires."* This Monitoring and Reporting Program to monitor surface water required by Order No. R5-2005-____ is necessary to assure compliance with Order No. R5-2005-____. The Discharger operates the facility that discharges waste subject to Order No. R5-2005-____.

EFFLUENT MONITORING

Effluent samples shall be collected at SN001 prior to discharge to the emergent marsh and downstream from the pH adjustment system. Effluent samples shall be representative of the volume and quality of the discharge. Time of collection of samples shall be recorded. Effluent monitoring shall include at least the following:

Constituents	Units	Type of Sample	Sampling Frequency
Flow	mgd	Metered or Estimated	Continuous or Daily (if estimated)
Chemical Oxygen Demand (COD)	mg/L, lbs/day	24-hour composite[1]	Biweekly (once every two weeks)
Total Suspended Solids (TSS)	mg/L, lbs/day	24-hour composite[1]	Biweekly (once every two weeks)
Dichlorobromomethane	µg/L, lbs/day	Grab	Monthly
Bis(2-ethylhexyl)phthalate	µg/L, lbs/day	Grab	Monthly

Constituents	Units	Type of Sample	Sampling Frequency
Acute Toxicity[2]	% Survival	24-hr. composite[1]	Quarterly
Chronic Toxicity[3]	See below	24-hr. composite[1]	Quarterly
Total residual chlorine[4,5]	mg/L, lbs/day	Metered	Continuous
Aluminum[6]	µg/L, lbs/day	24-hr composite	Quarterly
Iron	µg/L, lbs/day	24-hr. composite	Quarterly
Total Trihalomethanes[7]	µg/L, lbs/day	Grab	Quarterly
Naphthalene	µg/L, lbs/day	Grab	Quarterly
Manganese	µg/L, lbs/day	24-hr. composite	Quarterly
Persistent Chlorinated Hydrocarbon Pesticides[8]	µg/L, lbs/day	Grab	Quarterly
pH	Standard units	Metered or Grab	Continuous or Weekly (if estimated)
Temperature	°F	Grab	3 times weekly
Dissolved Oxygen	mg/L	Grab	Weekly
Electrical Conductivity	µmhos/cm	Grab	Quarterly
Turbidity	NTU	Grab	Weekly

[1] Composite samples shall be flow proportional composite samples.

[2] All acute toxicity bioassays shall be performed according to EPA-821-R-02-012 *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fifth Edition,* October 2002 (or latest edition) using fathead minnows (Pimephales promelas) with no pH adjustment, with exceptions granted to the Discharger by the Executive Officer and the Environmental Laboratory Accreditation Program (ELAP). Temperature and pH shall be recorded at the time of bioassay sample collection.

[3] See Three Species Chronic Toxicity Monitoring requirements below.

[4] Use of continuous monitoring instrumentation for chlorine and dechlorination agent residual in the effluent is an appropriate method of process control, however, the accuracy of the chlorine analyzers are not low enough to meet minimum detection levels. Residual dechlorination agent in the effluent indicates that chlorine is not present in the effluent, which can validate a zero residual reading on the chlorine analyzer. Reporting of these two constituents, when dechlorination agent is present and chlorine is zero, sufficiently insures compliance with the chlorine residual limit, as long as the instruments are maintained and calibrated in accordance with the manufactures recommendations. In addition to the continuous recorder, a monthly grab sample of the effluent shall be analyzed by a certified laboratory for chlorine and the dechlorination agent. Readings from the residual analyzers

shall be taken at the time of sampling, and reported with the laboratory results to validate the accuracy of the process control instrumentation.

[5] Report magnitude and duration of all non-zero residual events. Non-zero events are defined as a reading of zero for chlorine residual and the dechlorination agent is below the minimum detection limit of the continuous residual monitoring device. If the continuous monitoring device is out of service, then one grab chlorine residual sample shall be collected per day.

[6] Compliance can be demonstrated using either total, or acid-soluble (inductively coupled plasma/atomic emission spectrometry or inductively coupled plasma/mass spectrometry) analysis methods, as supported by U.S. EPA's Ambient Water Quality Criteria for Aluminum document (EPA 440/5-86-008), or other standard methods that exclude aluminum silicate as approved by the Executive Officer.

[7] Total trihalomethanes is the sum of bromoform, bromodichloromethane, chloroform, and dibromochloromethane.

[8] See the Information Sheet for the list of Persistent Chlorinated Hydrocarbon Pesticides.

If the discharge is intermittent rather than continuous, then on the first day of each such intermittent discharge, the Discharger shall monitor and record data for all of the constituents listed above, after which the frequencies of analysis given in the schedule shall apply for the duration of each such intermittent discharge. In no event shall the Discharger be required to monitor and record data more often than twice the frequencies listed in the schedule.

RECEIVING WATER MONITORING

All receiving water samples shall be grab samples. Receiving water monitoring shall include at least the following:

Station	Description
SN001	Prior to discharge to the emergent marsh and downstream from the pH adjustment system

Constituents	Units	Station	Sampling Frequency
Dissolved Oxygen	mg/L	SN001	Weekly
pH	standard units	SN001	Weekly
Temperature	°F	SN001	Weekly
Turbidity	NTU	SN001	Weekly

In conducting the receiving water sampling, a log shall be kept of the receiving water conditions, in the emergent marsh and all sampling locations. Attention shall be given to the presence or absence of:

a. Floating or suspended matter
b. Discoloration
c. Bottom deposits
d. Aquatic life
e. Visible films, sheens or coatings
f. Fungi, slimes, or objectionable growths
g. Potential nuisance conditions

Notes on receiving water conditions shall be summarized in the monitoring report.

THREE SPECIES CHRONIC TOXICITY MONITORING

Chronic toxicity monitoring shall be conducted to determine whether the effluent is contributing toxicity to the receiving water. The testing shall be conducted as specified in EPA-821-R-02-013, *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms,* Fourth Edition, October 2002. Composite samples shall be collected at the SN001 prior to discharge to the emergent marsh and downstream from the pH adjustment system. Twenty-four hour composite samples shall be representative of the volume and quality of the discharge. Time of collection samples shall be recorded. Dilution and control waters shall be provided by the laboratory or collected from the potable water supply at the facility. The sensitivity of the test organisms to a reference toxicant shall be determined concurrently with each bioassay and reported with the test results. Both the reference toxicant and effluent test must meet all test acceptability criteria as specified in the chronic manual. If the test acceptability criteria are not achieved, then the Discharger must re-sample and re-test within 14 days. Chronic toxicity monitoring shall include the following:

Species: *Fathead minnows* (*Pimephales promelas), Ceriodaphnia dubia and Selenastrum capriconicutum*

Frequency: *Quarterly*

Dilution Series: *None*

PRIORITY AND OTHER POLLUTANTS MONITORING

The State Water Resources Control Board (SWRCB) adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (known as the State Implementation Policy or SIP). **The SIP states that the Regional Boards will require periodic monitoring for pollutants for which criteria or objectives apply and for which no effluent limitations have been established.** Accordingly, the Regional Board is requiring, as part of this Monitoring and Reporting Program, that the Discharger conduct **effluent monitoring (at SN001)** of

priority pollutants and other pollutants **one time no more than 365 days and no less than 180 days prior to expiration of this Order**. The list of priority pollutants and other pollutants and required minimum levels (MLs) (or criterion quantitation limits) is included as **Attachment D**. The Discharger must analyze **pH and hardness** at the same time as priority pollutants.

All analyses shall be performed at a laboratory certified by the California Department of Health Services. The laboratory is required to submit the Minimum Level (ML) and the Method Detection Limit (MDL) with the reported results for each constituent. The MDL should be as close as practicable to the USEPA MDL determined by the procedure found in 40 CFR Part 136. The results of analytical determinations for the presence of chemical constituents in a sample shall use the following reporting protocols:

a. Sample results greater than or equal to the reported ML shall be reported as measured by the laboratory.
b. Sample results less than the reported ML, but greater than or equal to the laboratory's MDL, shall be reported as "Detected but Not Quantified," or DNQ. The estimated chemical concentration of the sample shall also be reported.
c. For the purposes of data collection, the laboratory shall write the estimated chemical concentration next to DNQ as well as the words "Estimated Concentration." Numerical estimates of data quality may be by percent accuracy (+ or – a percentage of the reported value), numerical ranges (low to high), or any other means considered appropriate by the laboratory.
d. Sample results that are less than the laboratory's MDL shall be reported as "Not Detected" or ND.

REPORTING

Monitoring results shall be submitted to the Regional Board by the **first day** of the second month following sample collection. Quarterly, semi-annual, and annual monitoring results and reports shall be submitted by the **first day of the second month following each calendar quarter, semi-annual period, and year**, respectively.

In reporting the monitoring data, the Discharger shall arrange the data in tabular form so that the date, sample types (e.g., influent, effluent, etc.), the constituents, and the concentrations are readily discernible. The data shall be summarized in such a manner to illustrate clearly whether the discharge complies with waste discharge requirements. The highest daily maximum for the month, monthly and weekly averages, and medians, should be determined and recorded.

If the Discharger monitors any pollutant at the locations designated herein more frequently than is required by this Order, the results of such monitoring shall be included in the calculation and reporting of the values required in the discharge monitoring report form. Such increased frequency shall be indicated on the discharge monitoring report form.

By **1 February** of each year, the Discharger shall submit a written report to the Executive Officer containing the following:

a. The names and telephone numbers of persons to contact regarding the plant for emergency and routine situations.

b. A statement certifying when the flow meter and other monitoring instruments and devices were last calibrated, including identification of who performed the calibration (Standard Provision C.6).

c. A statement certifying whether the current operation and maintenance manual, and contingency plan, reflect the wastewater treatment plant as currently constructed and operated, and the dates when these documents were last revised and last reviewed for adequacy.

The Discharger may also be requested to submit an annual report to the Regional Board with both tabular and graphical summaries of the monitoring data obtained during the previous year. Any such request shall be made in writing. The report shall discuss the facility's compliance record. If violations have occurred, the report shall also discuss the corrective actions taken and planned to bring the discharge into full compliance with the waste discharge requirements.

All reports submitted in response to this Order shall comply with the signatory requirements of Standard Provision D.6.

The Discharger shall implement the above monitoring program on the first day of the month following effective date of this Order.

Ordered by: _____
THOMAS R. PINKOS, Executive Officer

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(Date)