

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION

ORDER NO. R5-2005-0056

REQUIRING FORMICA CORPORATION  
SIERRA PLANT  
TO CEASE AND DESIST

FROM DISCHARGING CONTRARY TO REQUIREMENTS

The California Regional Water Quality Control Board, Central Valley Region (hereafter referred to as Regional Board), finds:

1. On 29 April 2005, the Regional Board adopted Waste Discharge Requirements Order No. R5-2005-0055, for Formica Corporation, Sierra Plant (hereafter Discharger). Waste Discharge Requirements Order No. R5-2005-0055 regulates the discharge of 0.6 million gallons per day (mgd) of non-contact cooling water into an unnamed tributary of Pleasant Grove Creek, and has resulted in the formation of a freshwater marsh at the point of discharge (hereafter emergent marsh). The unnamed tributary is tributary to Pleasant Grove Creek, Pleasant Grove Creek Canal, Natomas Cross Canal, and the Sacramento River, south of the confluence with the Feather River.
2. On 11 November 2004, the Discharger submitted the revised Report of Waste Discharge indicating that Formica plans to cease the discharge from its plant within the next two years as it implements a closed loop cooling system that will eliminate the need for any discharge to the surface waters. However, it is possible that regulatory requirements or unexpected equipment issues may occur that prevent this milestone from being met. Formica requests a two-year compliance schedule for compliance with permit limitations to allow for cessation of the discharge. If regulatory requirements or unexpected equipment issues require maintenance of the discharge beyond two years, Formica requests that an additional three years be added to the compliance schedule to allow time to meet regulatory requirements or resolve unexpected equipment issues. In such circumstances, the current discharge shall be allowed to continue for an additional three years, but in no case beyond 29 April 2010, so long as Formica submits a workplan to the Regional Board by 29 April 2007 that proposes additional measures that will address potential impacts of the discharge and, once approved, Formica implements that workplan promptly thereafter. Compliance time schedules included in the permit and Cease and Desist Order are based on the Discharger's request.
3. Waste Discharge Requirements Order No. R5-2005-0055, includes Effluent Limitations for aluminum, iron, total trihalomethanes, persistent chlorinated hydrocarbon pesticides, naphthalene, manganese, and total chlorine residual as contained in Sections B.1, which read in part as follows:

“1. Effluent discharge at SN001 shall not exceed the following limits:

<b>Constituents</b>	<b>Units</b>	<b>Monthly Average</b>	<b>Daily Maximum</b>	<b>4-Day Average</b>	<b>1-Hour Average</b>
Aluminum	µg/L	71	750	--	--
	lbs/day	0.59	6.3	--	--
Iron	µg/L	300	--	--	--
	lbs/day	2.5	--	--	--
Total Trihalomethanes	µg/L	80	--	--	--
	lbs/day	0.67	--	--	--
Naphthalene	µg/L	14	--	--	--
	lbs/day	0.12	--	--	--
Manganese	µg/L	50	--	--	--
	lbs/day	0.42	--	--	--
Persistent Chlorinated Hydrocarbon Pesticides	µg/L	--	ND	--	--
Total Chlorine Residual	mg/L	--	--	0.01	0.02
	lbs/day	--	--	0.08	0.17”

4. Waste Discharge Requirements Order No. R5-2005-0055, includes a Receiving Water Limitation for temperature as contained in Section E.8, which reads in part as follows:

“The discharge shall not cause the following in the receiving water:

8. The ambient temperature to increase more than 5°F.”

5. Based on sampling submitted by the Discharger, the discharge currently cannot consistently comply with the Effluent Limitations for aluminum, iron, total trihalomethanes, persistent chlorinated hydrocarbon pesticides, naphthalene, manganese, and total chlorine residual contained in the Waste Discharge Requirements Order No. R5-2005-0055.

All maximum detected effluent sampling results for aluminum, iron, total trihalomethanes, persistent chlorinated hydrocarbon pesticides, naphthalene, manganese, calculated projected Maximum Effluent Concentrations (MEC), and controlling water quality criteria for the receiving water are summarized in the table below:

Constituents	Maximum Detected Concentration (µg/L)	Controlling Water Quality Criteria (µg/L)	Criterion Concentration (µg/L)	Projected MEC <sup>1</sup> (µg/L)
Aluminum	28	Basin Plan narrative toxicity objective and USEPA Ambient Water Quality Freshwater Aquatic Life Criteria	87	209
Iron	140	Basin Plan chemical constituents objective and Secondary MCL	300	588
Chloroform	16	Basin Plan chemical constituents objective and Primary MCL	80	90
Naphthalene	4.5	Basin Plan narrative toxicity objective and U.S.EPA IRIS Reference Dose as a drinking water level	14	25
Manganese	74	Basin Plan chemical constituents objective and Secondary MCL	50	414

6. Based on sampling submitted by the Discharger, the discharge currently cannot consistently comply with the Receiving Water Limitation for temperature contained in the Waste Discharge Requirements Order No. R5-2005-0055.

The Receiving Water Limitation for temperature was exceeded two times from 1998-2002 (July and August 2001) based on monitoring at R-1 and R-2. Waste Discharge Requirements Order No. R5-2005-0055 applies the Basin Plan water quality objective for temperature directly as a receiving water limitation based on Basin Plan requirement. R-1 and R-2 are on Pleasant Grove Creek, nearly two miles downstream of the discharge point. Furthermore, there was high variation in the effluent temperature range during the permit term (48° to 100° F), which potentially could have adverse effects on aquatic life in the emergent marsh, the unnamed tributary, and downstream waters. These effluent temperature values were measured at the point of discharge into the emergent marsh. Warm-water fish species, specifically bass and blue gill, have been identified at this point. An aquatic organism survey and assessment of the emergent marsh, the unnamed tributary to Pleasant Grove Creek, or downstream waters has not been conducted to determine the presence of warm and cold-water species. The unnamed tributary to Pleasant Grove Creek and Pleasant Grove Creek currently are ephemeral streams. The discharge from the City of Roseville's new Pleasant Grove Creek Wastewater Treatment Plant discharge into Pleasant Grove Creek will change the character of the receiving stream and increase the likelihood of cold-water fish migration. Similar Creeks in the area, such as Dry Creek and Auburn Ravine, are known to support cold-water fish species.

The receiving stream at the point of discharge is the headwaters for the unnamed tributary to Pleasant Grove Creek. An upstream sampling point is not available to determine the thermal impacts of the discharge. The discharge flows through open areas, prior to entering downstream waters, and the thermal impacts from any discharges entering the drainage course could mask actual impacts of the discharge on downstream waters. The thermal impacts of the discharge have already been assessed and the proposal to eliminate the discharge is largely based on resolving the elevated temperature issues.

7. Based on the above Findings, this discharge represents a threatened discharge of waste in violation of the Effluent Limitations for aluminum, iron, total trihalomethanes, persistent chlorinated hydrocarbon pesticides, naphthalene, manganese, and total chlorine residual and the Receiving Water Limitation for temperature included in Waste Discharge Requirements Order No. R5-2005-0055.

In accordance with California Water Code (CWC) Section 13385 (j)(3), the Regional Board finds that, based upon the current condition of the wastewater treatment equipment, the Discharger is not able to consistently comply with aluminum, iron, total trihalomethanes, persistent chlorinated hydrocarbon pesticides, naphthalene, manganese, total chlorine residual, and temperature limitations. The aluminum, iron, total trihalomethanes, persistent chlorinated hydrocarbon pesticides, naphthalene, manganese, and total chlorine residual Effluent Limitations are new requirements that become applicable to the permit after the effective date of adoption of the waste discharge requirements, and after 1 July 2000, for which new or modified control measures are necessary in order to comply with the limitation, and the new or modified control measures cannot be designed, installed, and put into operation within 30 calendar days.

Source control and treatment actions can be taken to correct the violations that would otherwise be subject to mandatory penalties under California Water Code section 13385(h) and (i), and the Discharger has proposed reasonable measures to achieve compliance either by eliminating the discharge within two (2) years or, if regulatory requirements or unexpected equipment issues occur, by eliminating the discharge within five (5) years from the date the waste discharge requirements were required to be reviewed pursuant to Section 13380.

California Water Code (CWC) Section 13385 (j)(3) requires the Discharger to prepare and implement a pollution prevention plan pursuant to Section 13263.3 of the California Water Code. A pollution prevention plan is not necessary since the discharge will be eliminated.

Compliance with this Order exempts the Discharger from mandatory minimum penalties for violations of total chlorine residual Effluent Limitation through **1 August 2005**, aluminum, iron, total trihalomethanes, persistent chlorinated hydrocarbon pesticides, naphthalene, and manganese Effluent Limitations through **1 June 2007**, or through

**29 April 2010** if regulatory requirements or unexpected equipment issues require maintenance of the discharge beyond 1 June 2007, in accordance with California Water Code (CWC) Section 13385 (j)(3).

8. On 29 April 2005, in Rancho Cordova, California, after due notice to the Discharger and all other affected persons, the Regional Board conducted a public hearing at which evidence was received to consider a Cease and Desist Order to establish a time schedule to achieve compliance with waste discharge requirements.
9. Issuance of this Order is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, Section 21000, et seq.), in accordance with Section 15321 (a)(2), Title 14, California Code of Regulations.
10. Any person adversely affected by this action of the Regional Board may petition the State CA 95812-0100, within 30 days of the date in which the action was taken. Copies of the law and regulations applicable to filing petitions will be provided on request.

**IT IS HEREBY ORDERED** that:

1. Formica Corporation shall cease and desist from discharging, and threatening to discharge, contrary to Waste Discharge Requirements Order No. R5-2005-0055 Effluent Limitation No.1 for aluminum, iron, total trihalomethanes, persistent chlorinated hydrocarbon pesticides, naphthalene, manganese, and total chlorine residual and the Receiving Water Limitation No. 8 for temperature.
2. Formica Corporation shall comply with the following time schedule to assure compliance with aluminum, iron, total trihalomethanes, persistent chlorinated hydrocarbon pesticides, naphthalene, manganese, and total chlorine residual Effluent Limitations and the temperature Receiving Water Limitation contained in Waste Discharge Requirements Order No. R5-2005-0055 as described in the above Findings:

<u>Task</u>	<u>Compliance Date</u>
Submit Progress Report <sup>1</sup>	<b>1 August, quarterly</b>
Achieve Full Compliance with the Total Chlorine Residual Effluent Limitation	<b>1 August 2005</b>
Achieve Full Compliance if the discharge can be eliminated <sup>2</sup>	<b>1 June 2007</b>
Achieve Full Compliance if regulatory requirements or unexpected equipment issues occur <sup>3</sup>	<b>29 April 2010</b>

<sup>1</sup> The Progress Report shall detail what steps have been implemented towards cessation of the discharge from the Plant over the next two years.

<sup>2</sup> The Discharger shall achieve full compliance with Effluent Limitations for aluminum, iron, total trihalomethanes, persistent chlorinated hydrocarbon pesticides, naphthalene, and manganese, and the Receiving Water Limitation No. 8 for temperature by 1 June 2007 if the discharge can be eliminated.

CEASE AND DESIST ORDER NO. R5-2005-0056  
NPDES NO. CA004057  
FORMICA CORPORATION  
SIERRA PLANT  
PLACER COUNTY

6

- <sup>3</sup> The Discharger shall achieve full compliance with Effluent Limitations for aluminum, iron, total trihalomethanes, persistent chlorinated hydrocarbon pesticides, naphthalene, and manganese, and the Receiving Water Limitation No. 8 for temperature by 29 April 2010 if regulatory requirements or unexpected equipment issues require maintenance of the discharge beyond 1 June 2007.
3. If, in the opinion of the Executive Officer, the Discharger fails to comply with the provisions of this Order, the Executive Officer may apply to the Attorney General for judicial enforcement or issue a complaint for Administrative Civil Liability.

I, THOMAS R. PINKOS, 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, Central Valley Region, on 29 April 2005.

---

THOMAS R. PINKOS, Executive Officer

TTP