

DOCKET NO. D-2004-038-2

DELAWARE RIVER BASIN COMMISSION

**Mafco Worldwide Corporation
Surface Water Withdrawal
City of Camden, Camden County, New Jersey**

PROCEEDINGS

This docket is issued in response to an Application submitted by Mafco Worldwide Corporation (Mafco or docket holder) to the Delaware River Basin Commission (DRBC or Commission) on May 12, 2014 for renewal of an allocation of surface water and groundwater and review of a surface water and groundwater withdrawal project (Application). Water Allocation Permit No. 2148P was issued by the New Jersey Department of Environmental Protection (NJDEP) on February 27, 2007 and expires February 28, 2017. The docket holder's existing groundwater withdrawals are regulated by the NJDEP in accordance with the Administrative Agreement between DRBC and NJDEP, Section IV.C.4, enacted on December 18, 2009, amended May 8, 2013. The surface water withdrawal remains reviewable by the Commission and is the subject of this docket renewal.

The Application was reviewed for approval under Section 3.8 of the *Delaware River Basin Compact*. The Camden County Planning Board has been notified of pending action on this docket. A public hearing on this project was held by the DRBC on March 10, 2015.

A. DESCRIPTION

1. Purpose. The purpose of this project is to renew the approval to continue the withdrawal of up to 11 million gallons per month (mgm) of surface water from the Delaware River via Intakes Nos. 1, 2 and 3 for industrial cooling purposes at the docket holder's industrial food processing facility. The allocation of surface water is not an increase from the allocation approved in the previous docket.

2. Location. The docket holder's facility is located along the Delaware River in the City of Camden, Camden County, New Jersey. The project intake is located in Water Quality Zone 3 of the Delaware River in the Petty Island-Delaware River Watershed.

Specific location information has been withheld for security reasons.

3. **Area Served.** Surface water from the Delaware intake supplies industrial cooling water to only the Mafco plant site at South Jefferson Street and east of Second Street in the City of Camden, Camden County, New Jersey. For the purpose of defining Area Served, the Application is incorporated herein by reference consistent with conditions contained in the DECISION section of this docket.

4. **Physical features.**

a. **Design criteria.** Mafco's Camden plant produces concentrated licorice extract from raw licorice roots by treating the roots with hot water and concentrating the solution in multiple-effect evaporators. Waste licorice root is packaged for sale as a soil additive and mulch. Surface water from the Delaware River is used for industrial cooling purposes. Mafco reports that existing average and maximum surface water demands are 0.143 mgd (4.43 mgm) and 0.249 (7.72 mgm), respectively. The docket holder does not anticipate an increase in surface water demand over the next ten years. The continued allocation of 11 mgm should be sufficient to meet the docket holder's Delaware River surface water cooling demands.

The docket holder's groundwater withdrawals are regulated by the NJDEP. Groundwater withdrawals from Wells Nos. 1 East and 3R West are used primarily for steam generation and licorice extraction. Potable and sanitary water is supplied to the plant site by the City of Camden.

b. **Facilities.** The existing project intakes and wells have the following characteristics:

INTAKE NO.	WITHDRAWAL WATER BODY	PUMP CAPACITY	7Q10 FLOW AT INTAKE (CFS)	YEAR CONSTRUCTED
No. 1	Delaware River	1,500 gpm	3,067	1902
No. 2	Delaware River	400 gpm	3,067	1902
No. 3	Delaware River	400 gpm	3,067	1902

WELL NO.	DEPTH	CASING LENGTH/ CASING DIAMETER	PUMP CAPACITY	YEAR DRILLED
1 (East)	103'	83' / 8"	225 gpm	1951
3R (West)	149'	151' / 8"	250 gpm	1994

The intakes and wells are metered.

The water is not treated prior to entering the distribution system.

The project is located within the 100-year floodplain above the 100-year base flood elevation.

c. **Other.** Steam from the evaporators is condensed in direct contact barometric condensers with water from the Delaware River. The cooling water and condensate are treated at the docket holder's industrial wastewater treatment facility, most recently approved by DRBC Docket No. D-93-58 on February 23, 1994. The NJDEP issued its most recent NJPDES Permit No. NJ0004090 on June 5, 2009 for this treatment facility. The treatment facility has adequate capacity to continue to receive wastewater from the project. Process wastewater and sand filter backwash are conveyed to the Camden County Municipal Utilities Authority wastewater treatment plant most recently approved by DRBC Docket No. D-1971-09 CP-10 on March 7, 2012. The NJDEP issued its most recent NJPDES Permit No. NJ0026182 on October 23, 2011 for this treatment facility. The treatment facility has adequate capacity to continue to receive wastewater from the project.

d. **Cost.** There are no construction costs associated with this renewal project.

B. **FINDINGS**

Administrative Agreement

This project involves a withdrawal of groundwater and surface water. The groundwater withdrawals are classified as a Category F Project according to the Administrative Agreement between the DRBC and NJDEP (AA) Section IV.C.1., enacted on December 18, 2009. Applications for modifications or renewals of permits associated with the groundwater withdrawal approval shall be submitted to NJDEP. The Commission conducts no review unless review and/or docket action or technical assistance is requested by the DRBC Commissioner from the State of New Jersey as described in Condition C.II.n. in the Decision section of this docket. The surface water withdrawal project described in this docket is from the mainstem Delaware which is considered shared interstate waters and is classified as a Category B project. The Commission retains review and approval and issues a docket for these projects. The docket holder is required to submit an application to the DRBC for review for renewals or modifications of the surface water withdrawal.

The NJDEP water allocation is for a limited period and is not subject to automatic renewal. The permittee is in Critical Area 2 designated by the State of New Jersey and is subject to such requirements as may be necessary pursuant to N.J.A.C. 7:19-8.

NJDEP Water Allocation Permit grants the permission to withdraw up to 475 gpm and 11 mgm of groundwater from Wells Nos. 1 and 3R. These wells are screened in the Potomac-Raritan-Magothy Aquifer and are located within the threatened zone of the NJDEP's Water Supply Critical Area No. 2. Accordingly, the docket holder has been mandated by the NJDEP to limit the total withdrawal from these wells to 62.5 mg/year, effective. The NJDEP Water Allocation Permit expires on February 28, 2017.

In its Application, Mafco requested a surface water allocation of 40 mg/30 days (1.33 mgd). The previous docket approved an allocation of 11 mg/30 days of surface water, but conditioned that the Executive Director may authorize an emergency increase of up to 31 mg/30 days in the event that additional surface water is needed for alternative cooling equipment or a change in raw materials product mixes. To be consistent with this condition, NJDEP Water allocation Permit No. 2148P permitted a maximum of 20 mgm from the Delaware River and 11 mgm from the groundwater sources (total of 31 mgm). The docket holder requested that the condition for the emergency increase in allocation continue to be included in this docket renewal. This docket continues to provide for an emergency increase in surface water allocation, contingent upon approval by the DRBC Executive Director, but limits the emergency increase of surface water allocation to a maximum of 20 mgm. Water withdrawal data from January 2000 through December 2013 shows that the maximum monthly withdrawal from the Delaware River was approximately 6.6 mgm. Mafco's estimated ten-year projected maximum surface water use as stated in the Application is 0.249 mgd (7.72 mgm). The continued allocation of 11 mgm granted herein satisfies the docket holder's ten year projected maximum surface water use.

At the project withdrawal site, the Delaware River is tidal and its flow is regulated by upstream reservoir releases. The Trenton low flow target is 2,500 cfs (1.62 billion gallons per day). The addition of the tidal tributaries upstream of the withdrawal location at their Q7-10 flow and the low flow Trenton target and mainstem withdrawals and discharges results in a low-flow of approximately 3,067 cfs (1.98 billion gallons per day) for the Delaware River at the withdrawal location (River Mile 97.5).

MAFCO estimates that the project surface water withdrawals, used for the purpose of industrial cooling, result in a consumptive use of 25 percent of the total water use. The DRBC definition of consumptive use is defined in Article 5.5.1.D of the *Administrative Manual – Part III – Basin Regulations – Water Supply Charges*.

The docket holder shall continue to pay for surface water use from the water diversion in accordance with the provisions of Resolution No. 74-6, as amended as described in Condition C.f. in the DECISION section.

The project is designed to conform to the requirements of the *Water Code* and *Water Quality Regulations* of the DRBC.

The project does not conflict with the Comprehensive Plan and is designed to prevent substantial adverse impact on the water resources related environment, while sustaining the current and future water uses and development of the water resources of the Basin.

C. DECISION

I. Effective on the approval date for Docket No. D-2004-038-2 below, the project described in Docket No. D-2004-38-1 is terminated and replaced by Docket No. D-2004-038-2.

II. The project and appurtenant facilities as described in the Section A “Physical features” are approved pursuant to Section 3.8 of the *Compact*, subject to the following conditions:

a. Docket approval is subject to all conditions, requirements, and limitations imposed by the NJDEP in its Water Allocation Permit, and such conditions, requirements, and limitations are incorporated herein, unless they are less stringent than the Commission’s.

b. The intake and operational records shall be available at all times for inspection by the DRBC.

c. The intake shall be operated at all times to comply with the requirements of the *Water Code* and *Water Quality Regulations* of the DRBC.

d. During any month, the total combined withdrawal from the project intakes shall not exceed 11.0 mgm. No intakes shall be pumped above the maximum instantaneous rate and monthly allocation as indicated below:

INTAKE NO.	MAXIMUM INSTANTANEOUS RATE	MONTHLY ALLOCATION
No. 1	1,500 gpm	11.0 mg
No. 2	400 gpm	11.0 mg
No. 3	400 gpm	11.0 mg

e. The Executive Director may authorize an emergency increase in the withdrawal of water from the Delaware River intake of up to 20 mgm for the period needed to repair or replace either or both of the two mechanical vapor recompression evaporators necessitating the use of the two less efficient thermo-vapor recompression evaporators. In addition, the Executive Director may also authorize an increase of withdrawal for the Delaware River intake of up to 20 mgm upon a demonstration by the docket holder that the increase is necessary due to raw materials product mix change.

f. The docket holder shall pay for surface water use in accordance with Administrative Manual – Part III Basin Regulations – Water Supply Charges.

g. The project withdrawals shall be metered with an automatic continuous recording device that measures to within 5 percent of actual flow. An exception to the 5 percent performance standard, but no greater than 10 percent, may be granted if maintenance of the 5 percent performance is not technically feasible or economically practicable. A record of daily withdrawals shall be maintained, and monthly totals shall be reported to the NJDEP quarterly and shall be available at any time to the Commission if requested by the Executive Director.

h. The docket holder shall implement to the satisfaction of the NJDEP, the continuous program to encourage water conservation in all types of use within the facilities

served by this docket approval. The docket holder will report to the NJDEP on the actions taken pursuant to this program and the impact of those actions as requested by the NJDEP.

i. No water service connections shall be made to newly constructed premises with plumbing fixtures and fittings that do not comply with water conservation performance standards contained in Resolution No. 88-2 (Revision 2).

j. The docket holder shall implement to the satisfaction of the NJDEP, a drought or other water supply emergency plan.

k. Nothing herein shall be construed to exempt the docket holder from obtaining all necessary permits and/or approvals from other State, Federal or local government agencies having jurisdiction over this project.

l. The docket holder is permitted to provide the water approved in this docket to the areas included in Section A.3. Area Served of this docket. Any expansion beyond those included in Section A.3. Area Served is subject to DRBC review and approval in accordance with Section 3.8 of the *Compact*.

m. Unless an extension is requested and approved by the Commission in advance, in accordance with paragraph 11 of the Commission's Project Review Fee schedule (Resolution No. 2009-2), the docket holder is responsible for timely submittal of a docket renewal application on the appropriate DRBC application form at least 12 months in advance of the docket expiration date set forth below. The docket holder will be subject to late charges in the event of untimely submittal of its renewal application, whether or not DRBC issues a reminder notice in advance of the deadline or the docket holder receives such notice. In the event that a timely and complete application for renewal has been submitted and the DRBC is unable, through no fault of the docket holder, to reissue the docket before the expiration date below (or the later date established by an extension that has been timely requested and approved), the terms and conditions of the current docket will remain fully effective and enforceable against the docket holder pending the grant or denial of the application for docket approval.

n. Applications for modifications or renewals of permits associated with the groundwater withdrawals shall be submitted to NJDEP. The Commission conducts no review unless review and/or docket action or technical assistance is requested by the DRBC Commissioner from the State of New Jersey in accordance with the AA, Section IV.C.4

o. The issuance of this docket approval shall not create any private or proprietary rights in the water of the Basin, and the Commission reserves the rights to amend, alter or rescind any actions taken hereunder in order to insure the proper control, use and management of the water resources of the Basin.

p. If the monitoring required herein, or any other data or information demonstrates that the operation of this project significantly affects or interferes with any domestic or other existing uses of ground or surface water, or if the docket holder receives a complaint by any existing ground or surface water users within the zone of influence of the withdrawal, the docket holder shall immediately notify the Executive Director of any complaints

by any ground or surface users within the zone of influence of the withdrawal, and unless excused by the Executive Director, shall investigate such complaints. The docket holder should direct phone call notifications of potential well or surface water interference or complaints of interference to the DRBC Project Review Section at 609-883-9500, extension 216. Oral notification must always be followed up in writing directed to the Executive Director. In addition, the docket holder shall provide written notification to all potentially impacted users of wells or surface water supplies of the docket holder's responsibilities under this condition. Any ground or surface water user which is substantially adversely affected, rendered dry or otherwise diminished as a result of the docket holder's project withdrawal, shall be repaired, replaced or otherwise mitigated at the expense of the docket holder. A report of investigation and/or mitigation plan prepared by a hydrologist shall be submitted to the Executive Director as soon as practicable. The Executive Director shall make the final determination regarding the validity of such complaints, the scope or sufficiency of such investigations, and the extent of appropriate mitigation measures, if required.

q. The Executive Director may modify or suspend this approval or any condition thereof, or require mitigating measures pending additional review, if in the Executive Director's judgment such modification or suspension is required to protect the water resources of the Basin.

r. During any water emergency or other non-emergency declaration by the Governor of New Jersey, NJDEP or the Commission, water service or use by the project docket holder pursuant to this docket approval shall be subject to any order or restriction governing those non-essential uses specified by the NJDEP to the extent that they may be applicable, and to any other emergency resolutions or orders adopted by the Commission.

s. Any person who objects to a docket decision by the Commission may request a hearing in accordance with Article 6 of the *Rules of Practice and Procedure*. In accordance with Section 15.1(p) of the Delaware River Basin Compact, cases and controversies arising under the Compact are reviewable in the United States district courts.

BY THE COMMISSION

APPROVAL DATE: March 11, 2015

EXPIRATION DATE: March 11, 2025