



STATE OF DELAWARE  
DEPARTMENT OF NATURAL RESOURCES &  
ENVIRONMENTAL CONTROL  
**DIVISION OF WATER RESOURCES**  
89 KINGS HIGHWAY  
DOVER, DELAWARE 19901

## **Fact Sheet**

Pinnacle Foods Group LLC  
P.O. Box 625  
Millsboro, Delaware 19966

NPDES Permit No. DE 0000736  
Permit No. WPCC 3245E/74

Pinnacle Foods Group LLC has applied for reissuance of its National Pollutant Discharge Elimination System (NPDES) permit No. DE 0000736 to continue discharging treated sanitary waste water, industrial process waste water, and storm water from its facility (located at 29984 Pinnacle Way, Millsboro, Sussex County, Delaware) to the Whartons Branch, a tributary of Iron Branch and Indian River.

### **Proposed Changes**

1. Revise BOD<sub>5</sub> Limitations for Outfall 001 to comply with Section 7.03.a. of the Delaware Regulations Governing the Control of Water Pollution.
2. Revise Enterococcus Limitations for Outfall 001 to comply with Total Maximum Daily Load (TMDL) Regulations.
3. Revise Special Condition No. 3 to comply with current storm water regulations.
4. Revise Special Condition No. 7 to require continued operation of Nutrient Offset Plan.

### **Facility Location**

The facility is located at 29984 Pinnacle Way, Millsboro, Sussex County, Delaware.

### **Activity Description**

The facility is a pickling plant that processes and packages pickles and peppers.

### **Discharge Description**

Nine (9) outfalls are identified in the NPDES permit application. Outfall 001 consists of treated sanitary waste water, process waste water, and cooling water. Outfalls 002 through 009 consist of storm water run-off from roof tops, storage areas, loading and unloading areas, brine storage areas, and parking areas. Specific descriptions for each outfall are included in the permit.

### **Receiving Stream Classification**

Whartons Branch is a fresh water body that is tidally influenced by the brackish water of Indian River. The designated protected uses for the Indian River in the area of the discharge are: industrial water supply; primary contact recreation; secondary contact recreation; and propagation and maintenance of fish, aquatic life, and wildlife. The marine water segments (tidal portion) of Indian River are designated as waters of exceptional recreation or ecological significance (ERES). The Department adopted a TMDL

Regulation for nutrients for the Indian River, Indian River Bay, and Rehoboth Bay in December 1998. The TMDL requires systematic elimination of point source nutrient discharges. The Department also adopted TMDL Regulation for bacteria for the Indian River, Indian River Bay, and Rehoboth Bay in December 2006. The TMDL regulation contains waste load allocations for all point source discharges for enterococcus.

## **Statutory and Regulatory Basis**

The Delaware Department of Natural Resources and Environmental Control (DNREC) proposes to reissue an NPDES permit to discharge the wastewater subject to certain effluent discharge limitations, monitoring requirements and other terms and conditions identified in the draft permit. Section 402 of the federal Clean Water Act, as amended, and 7 Del. C. Chapter 60 provide the authority for permit issuance. Federal and state regulations promulgated pursuant to these statutes are the regulatory bases for permit issuance.

## **Bases for Effluent Limitations**

DNREC has examined the application, recent discharge monitoring data, and related information. The Department proposes to reissue the facility's NPDES permit for a period not to exceed five (5) years, subject to the effluent discharge limitations and monitoring requirements shown in the attached permit.

### **Flow**

The current permitted flow limit of 0.6 million gallons per day is performance-based. The flow limit is proposed to be retained. Monitoring frequency is continuous.

### **BOD<sub>5</sub>**

The BOD<sub>5</sub> limits in the current permit are performance-based. The proposed permit includes more stringent BOD<sub>5</sub> limits to comply with Section 7.03.a. of the Delaware Regulations Governing the Control of Water Pollution (RGCWP). Monitoring frequency is once weekly.

### **Total Suspended Solids (TSS)**

The total suspended solids (TSS) limits are proposed to be retained from the current permit. The TSS limits are performance-based requirements. Monitoring frequency is once weekly.

### **pH**

The technology-based limitations for pH are proposed to be retained from the current permit. Monitoring frequency is once daily.

### **Nutrients**

The Department adopted TMDL Regulation for nutrients for the Indian River, Indian River Bay, and Rehoboth Bay in December 1998. The TMDL for the Inland Bays requires systematic elimination of point source nutrient discharges. Due to the high salt content of the Pinnacle effluent, disposal options are limited. Land application of the effluent is prohibited by DNREC land treatment regulations and other treatment options are not technically or economically feasible. Based on this information, total elimination of the nutrient discharge from the Vlastic facility is not practical. As an alternative to total elimination of the nutrient discharge, the nutrient limits in the current permit were reduced by 50% from previous permitted levels, and the remaining nutrients were proposed to be offset by reducing/eliminating non-point source nutrient loads in the watershed. The nutrient reduction and offset plans were implemented during the term of the current permit and are summarized below:

**A. Nutrient Reduction Plan**

The current permit limits for total phosphorus (TP) and ammonia nitrogen (NH<sub>3</sub>) represented a 50% reduction from the permit load limits in the previous permit. The TP load limits are currently set at 4 lbs/day daily average and 8.5 lbs/day daily maximum. The NH<sub>3</sub> load limits are currently set at 16.5 lbs/day daily average and 33.5 lbs/day daily maximum. A daily maximum concentration limit for NH<sub>3</sub> of 6.7 mg/L was also included in the current permit. Additional monitoring for nitrate nitrogen (NO<sub>3</sub>), nitrite nitrogen (NO<sub>2</sub>), and total kjeldahl nitrogen (TKN) was included in the current permit. Monitoring frequency is once monthly. These effluent limits and monitoring requirements are proposed to be retained.

**B. Nutrient Offset Plan**

The current permit allowed the facility, as described above, to discharge up to a total of 6,023 lbs/yr of nitrogen and 1,460 lbs/yr of phosphorus. The facility was required to offset at least an equivalent amount of nitrogen and phosphorus by reducing/eliminating non-point source nutrient loads, as follows:

1. Corn production was eliminated on a 35 acre parcel adjacent to the facility. The parcel had been in constant corn production with nutrients being applied via spray irrigation of groundwater (State Permit No. 3016B/92) and application of the fertilizers required for corn production. Removing the parcel from corn production has resulted in a net reduction of 5,495 lbs/yr of nitrogen and 1,225 lbs/yr of phosphorus.
2. Reed canary grass and/or orchard grass was planted in place of the corn crop on the adjacent 35 acre parcel. The grasses remove nutrients from the soil and from the spray irrigation water, thus reducing the overall nutrient load to the watershed. The grass is harvested and utilized outside the watershed. The nutrient removal system has resulted in a net reduction of 1,184 lbs/yr of nitrogen and 573 lbs/yr of phosphorus.
3. The facility pumps approximately 169,836,000 MG/yr of groundwater for use in processing pickles. The groundwater is processed and treated in the on-site treatment plant and discharged via Outfall 001. Through the groundwater processing and treatment, the facility reduces the amount of nitrogen in the environment by 1,029 lbs/yr and increases the amount of phosphorus by 76 lbs/yr.

Through the implementation and maintenance of the above offset plan, the permittee is offsetting an average of 7,708 lbs/yr of nitrogen and 1,722 lbs/yr of phosphorus. The facility discharges through Outfall 001 an average of 3,413 lbs/yr of nitrogen and 219 lbs/yr of phosphorus. The data indicate average offset to discharge ratios of 2.3 to 1 for nitrogen and 7.9 to 1 for phosphorus.

Monitoring requirements for the nutrient offset portion of this NPDES permit are conducted in accordance with the requirements contained in the existing land application permit (State Permit No. LTS 5017/92/05).

Based on the above discussion, the nutrient reduction and offset plans are accomplishing the intended goal of offsetting the nutrient load to the watershed and are proposed to remain in effect. The Nutrient Reduction and Offset Plan meets the zero discharge requirement of the TMDL.

**Bacteria**

The Department also adopted TMDL Regulation for bacteria for the Indian River, Indian River Bay, and Rehoboth Bay in December 2006. The TMDL regulation contains a waste load allocation (WLA) for the Pinnacle facility for enterococcus of  $7.5 \times 10^8$  CFU/day. This equates to a concentration limit of 33 colonies/100mL for this facility. The current permit limit for enterococcus of 10 colonies/100mL was

based on Section 11.6 of the State of Delaware Surface Water Quality Standards (SWQS), as amended, August 11, 1999. The current SWQS, as amended July 11, 2004, includes water quality criteria for enterococcus of 35 CFU/100 mL. The TMDL WLA for enterococcus is proposed to be implemented in the permit as an effluent limit as an average daily concentration. Monitoring Frequency is once weekly.

As per 40 CFR 122.44(l)(2), including less stringent numbers in a permit is allowed based on new information available that was not available at the time of permit issuance which would have justified a less stringent effluent limitation. The TMDL WLA is considered new information that was not available at the time the permit was last issued.

## **Special Conditions**

Special Condition No. 1 states that this permit supersedes NPDES Permit DE 0000736 and State Permit WPCC 3245D/74 issued on November 2, 2000, effective date December 1, 2000.

Special Condition No. 2 is a standard permit clause which provides for reopening the permit to address water quality concerns.

Special Condition No. 3 requires the facility to continue to implement and maintain a Storm Water Plan.

Special Condition Nos. 4, 5, and 6 require proper disposal of sludge in accordance with State and Federal requirements.

Special Condition No. 7 requires the facility to continue to implement and maintain the Nutrient Offset Plan in order to comply with the TMDL for the Inland Bays.

## **Antidegradation Statement**

Except where otherwise noted herein, the proposed effluent limitations included in this NPDES permit comply with the applicable portions of the State of Delaware Surface Water Quality Standards, Section 5: Antidegradation and ERES Waters Policies.

## **Public Notice and Process for Reaching a Final Decision**

The public notice of the Department's receipt of the application and of reaching the tentative determinations outlined herein will be published in the Wilmington News Journal and the Delaware State News on **August 20, 2008**. Interested persons are invited to submit their written views on the draft permit and the tentative determinations made with respect to this NPDES permit application. The Department will not hold a public hearing on this application unless the Department receives a meritorious request to do so or unless the notice of this proposal generates substantial public interest. A public hearing request shall be deemed meritorious if it exhibits a familiarity with the application and a reasoned statement of the permit's probable impact. The request for a public hearing shall be in writing and shall state the nature of the issues to be raised at the hearing. All comments received by **4:30 p.m. on September 19, 2008** will be considered by the Department in preparing the final permit.

## **Department Contact for Additional Information:**

Name: Tony Hummel, PE  
Telephone Number: (302) 739-9946