

**NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION  
DIVISION OF WATER QUALITY  
FORM R CATEGORY EG - LAND APPLICATION OF FOOD PROCESSING BY-PRODUCTS  
(FOOD PROCESSING RESIDUALS AND FOOD PROCESSING VEGETATIVE WASTES)**

**Refer to Appropriate Completeness Checklist and Instructions and N.J.A.C. 7:14A-20.**

**Provide All Applicable Information. Please Print or Type. Attach additional sheets if necessary.**

**If you need assistance in completing Form R, contact the Bureau of Pretreatment Residuals at (609) 633-3823.**

**SUPPLEMENTAL APPLICATION FORM TO NJPDES-1 FOR NJPDES FOOD PROCESSING BY-PRODUCTS PERMITS**

**PART A. GENERAL INFORMATION**

**A1. Facility Information**

- a. Name of Facility: \_\_\_\_\_
- b. Facility Contact: Name: \_\_\_\_\_  
Title: \_\_\_\_\_ E-Mail: \_\_\_\_\_  
Phone #: \_\_\_\_\_ Cell #: \_\_\_\_\_
- c. Facility Location: Street or Route #: \_\_\_\_\_  
County: \_\_\_\_\_  
City or town: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_
- d. Facility Mailing: Street or Route #: \_\_\_\_\_  
City or town: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_
- e. Are any food processing by-products related operational or maintenance aspects of this facility the responsibility of a contractor?  
 Yes  No

If yes, provide the following for each contactor (attach additional pages if necessary).

Name: \_\_\_\_\_

Street or P.O. Box: \_\_\_\_\_

City or Town: \_\_\_\_\_

Phone Number: \_\_\_\_\_ Email: \_\_\_\_\_

Responsibilities of contractor:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## **PART B. Food Processing By-Product Generator Information**

### **B1. Site Information**

- a. Identify the type of zoning for the facility from among the following:
- Residential                       Industrial  
 Commercial                       Other (Specify: \_\_\_\_\_)
- b. Is the facility located within the Pinelands Area (designated as such by Section 10(a) of the Pinelands Protection Act)?     Yes (proceed to b.1)     No (skip to c.)
1. If yes, submit either a:
- Certificate of Filing (COF) for the activity issued by the Pinelands Commission  
**or**  
 A written determination from the Pinelands Commission that a COF is not required

**Questions regarding Pinelands applicability shall be directed to the Pinelands Commission at (609) 894-7300. Further information may be obtained at [www.state.nj.us/pinelands/](http://www.state.nj.us/pinelands/)**

- c. Is the facility located within the Highlands Preservation Area (a map of the area may be viewed at [www.state.nj.us/dep/highlands/highlands\\_map.pdf](http://www.state.nj.us/dep/highlands/highlands_map.pdf))?     Yes (proceed to c.1)     No (skip to d.)
1. If yes, and the facility is proposing “development” as defined by N.J.A.C. 7:38, submit a Highlands Applicability Determination from the Division of Watershed Management - Bureau of Watershed Regulation for the facility.

**Questions regarding Highlands applicability shall be directed to the Bureau of Watershed Regulation at (609) 984-6888. Further information may be obtained at [www.nj.gov/dep/highlands/](http://www.nj.gov/dep/highlands/)**

- d. Attach an original or clear copy of a 1:24,000 scale (7.5 minute Quadrangle) United States Geological Survey Topographic Map showing the exact location of the facility and indicating the sheet name from which the map portion was taken.
- e. Attach an original or clear copy of the municipal tax map showing the location of the facility and indicating the sheet name from which the map portion was taken.
- f. Attach a clear copy of an aerial photograph depicting the boundaries of the facility and the location of all food processing by-products storage units and associated appurtenances.

**Aerial photos may be obtained by using NJDEP’s interactive mapping tool at [www.nj.gov/dep/gis/newmapping.htm](http://www.nj.gov/dep/gis/newmapping.htm)**

- g. Attach an up-to-date, detailed site plan map, prepared, signed and sealed by a licensed professional engineer or other professional qualified in accordance with the State Board of Professional Engineers and Land Surveyors rules, *N.J.A.C. 13:40*, which identifies (plots) the placement of all equipment,

buildings, activities and areas related to the receipt, storage, processing and transferring of all food processing by-products.

**B2. Amount of Food Processing By-Products Generated On Site**

a. Volume and types of food processing by-products generated on-site:

Food Processing By-Product Description	Approximate Percent Total Solids	Treatment Process Source	Quantity per Year (dry metric tons)	Classification (hazardous or nonhazardous)

b. Attach a detailed line drawing of food processing by-products flow through the facility that identifies all units where food processing by-products are generated and all treatment units, including all processes used for collecting, dewatering, storing, or treating food processing by-products, and the destination(s) of all liquids and solids leaving each unit (include on the line drawing the point where any chemicals are added and the type of chemical that is added).

**B3. Types of Food Processing By-Products Received from Off Site**

a. Please indicate if your facility receives, or will receive, the following types of food processing by-products from another facility for treatment, use, or disposal.

Liquid Food processing by-products       Yes    No

Dewatered Food processing by-products       Yes    No

b. Describe the location(s) where food processing by-products generated from another facility are added and indicate on the line drawing required in B2(c).

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c. Provide the following information for each facility from which food processing by-products are received that is known at the time of permit application. If you receive, or will receive, food processing by-products from more than one facility, attach additional pages as necessary.

1. Facility Name: \_\_\_\_\_
2. Contact Person: \_\_\_\_\_ Phone #: \_\_\_\_\_
3. Mailing Address: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_
4. Facility Address: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_
5. Total dry metric tons per 365-day period received from this facility: \_\_\_\_\_

**B4. Additional Food Processing By-Products Information**

**Information on the characteristics of each food processing by-product proposed to be introduced, to the extent known at the time that the permit application is submitted.**

a. A dated analysis of each food processing by-product on a mg/kg dry weight basis (or other unit as specified), at a minimum, for the following constituents:

Ammonia-Nitrogen	Nitrate-Nitrogen	Total Kjeldahl Nitrogen
Phosphorus	Potassium	Total Solids (% by weight)
Arsenic	Cadmium	Calcium
Copper	Lead	Mercury
Molybdenum	Nickel	Selenium
Zinc	pH (standard units)	Water Extractable Phosphorus

Note: All monitoring shall be performed by a laboratory certified by the Department for the analysis of those specific parameters in accordance with N.J.A.C. 7:18.

- b. If data has not already been submitted to the Department, a summary of all data submitted under the SQAR for the previous 12-month period.
- c. Additional quality analyses (including characteristics pursuant to N.J.A.C. 7:26G) may be required by the Department after evaluation of past SQAR reports or other relevant information, such as information on industrial discharges which might contribute constituents not normally evaluated under the SQAR program or which may exceed levels identified in USEPA's Technical Support Document for Land Application of Sewage Sludge, EPA 822/R-93-001a and 001b, November 1992.

**B5. Identification of Distribution Sites**

Identify each distribution site known at the time of permit application below (attach additional pages if necessary).

a. Name: \_\_\_\_\_

b. Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

c. Phone No.: \_\_\_\_\_

d. Location of site (street address, block number, lot number, county, municipality) where storage, blending and/or land application will occur:  
\_\_\_\_\_  
\_\_\_\_\_

e. Total acreage to be utilized for land application (if applicable): \_\_\_\_\_

f. Affix hereon a U.S. Department of Agriculture, Soil Conservation Service Soil Survey Map (clear copy or original) for the area of the proposed site identified above.

- Delineate thereon the property boundaries for the site and the areas where food processing by-products are to be stored and/or land applied.
- The map portion is from the \_\_\_\_\_ County Soil Survey.
- The map portion is from the sheet number \_\_\_\_\_ of the above Soil Survey.

g. Affix hereon a municipal tax map (clear copy or original) for the area of the site where food processing by-products are to be stored and/or land applied.

- Delineate thereon the property boundaries for the site and the areas where food processing by-products are to be stored and/or land applied. Indicate tax identification, Lot numbers, and Block numbers.

h. Describe specifically how the subject property is zoned:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

i. Whether any food processing by-products are to be stored and/or land applied within an easement.

Yes \_\_\_\_\_ No. \_\_\_\_\_  
(Initial) (Initial)

If yes, what type of easement. \_\_\_\_\_  
\_\_\_\_\_

j. Whether any food processing by-products are to be stored and/or land applied within areas under the jurisdiction of the Pinelands Development Commission.

Yes \_\_\_\_\_ No. \_\_\_\_\_  
(Initial) (Initial)

k. Provide a copy of the conservation plan approved by the local SCD for the user site, or written determination from the local SCD that no conservation plan is necessary for the site, or that an existing conservation plan is sufficient for the proposed activity.

## **B6. Narrative Description of Food Processing By-Products Distribution Sites**

- a. Attach a narrative description of how food processing by-products will be directly applied to farms with suitable soils for land application. Include the type of haulage vehicles, land application equipment that will be used, a detailed description of storage areas that will be utilized, and any other relevant information.
- b. Upon review of this application the Department may determine that the applicant must perform an environmental assessment (EA) pursuant to N.J.A.C. 7:14A-20.6 for the location where food processing by-products will be prepared to be applied to the land. The magnitude and detail of the EA shall be determined by the Department and shall be relative to the nature, scale and location of the proposed facility.

## **B7. Food Processing By-Products Sampling Plan**

**A food processing by-products sampling plan shall be developed and maintained that details all measurements, sampling and analytical procedures. The plan shall include, but not be limited to the following:**

- a. Describe all intended sampling location(s) and the rationale for choosing such location(s). Food processing by-products samples used to measure compliance shall be collected at locations representative of the quality of food processing by-products immediately prior to use or disposal.
- b. Describe the sampling equipment to be used (sampling device, container type and size, and container cover).
- c. Describe the procedure to be used for cleaning/decontamination of sample containers and sampling equipment.
- d. Describe in detail the procedure to be used for collecting the sample(s) to ensure the sample obtained for analysis is representative of the food processing by-products removed for use or disposal, include a schedule for days and times of sample collection, the procedures to be used to obtain a representative sample from the chosen sampling point, and the procedures to be used to mix composite samples (See *New Jersey Sludge Sampling and Analytical Guidance Document*, Appendix E).
- e. Describe the sampling method(s) (that is, Grab v. Composite), the number of samples to be taken per sampling event and the interval between grabs (include sample size by weight or volume.), and the frequency of the sampling event(s). (Note, different parameters or groups of parameters may require different sampling methods and/or locations.).
- f. Provide the name of the person who will take the sample(s) and his/her qualifications.
- g. Provide the name and address of all laboratories to be employed, including sub-contracting laboratories (if multiple labs, indicate which groups of parameters each lab is responsible for).
- h. Describe the post-collection sample handling procedures employed to maintain sample integrity. This description should explain how the samples will be preserved and transported, how the holding times

will be met, and whether a chain-of-custody is required (See *New Jersey Sludge Sampling and Analytical Guidance Document*, Appendix E).

- i. Describe sample documentation procedures, specifically, describe those elements to be included in a field logbook (see *New Jersey Sludge Sampling and Analytical Guidance Document*, Appendix F).
- j. Describe how the following elements of the sampling event will be reported to the certified laboratory:
  - Chemicals added during processing (alum, ferric chloride, lime, organic polymer etc.)
  - analytical methods (see below)
  - treatment process conditions or deviations
- k. Provide a description of record-keeping procedures. The description should explain what information will be retained and for how long, and how the information will be stored.
- l. Provide the frequency of analysis and the analytical methods requested for the following parameters. Sample holding times are indicated for use with your certified laboratory (see *New Jersey Sludge Sampling and Analytical Guidance Document*, Appendix A, for additional information, including information on Target Reporting Levels):

PARAMETER	FREQUENCY OF ANALYSIS	ANALYTICAL METHOD	HOLDING TIME
Total Solids, (% by weight)		SM Method 2540G	7 days
Aluminum, Total			6 months
Arsenic, Total			6 months
Cadmium, Total			6 months
Chromium, Total			6 months
Copper, Total			6 months
Iron, Total			6 months
Lead, Total			6 months
Mercury, Total		SW-846 Method 7471	28 days
Molybdenum, Total			6 months
Nickel, Total			6 months
Nitrogen, Total Kjeldahl (TKN)			28 days
Nitrogen, Ammonia (NH <sub>3</sub> -N)			28 days
Nitrogen, Nitrate (NO <sub>3</sub> -N)		SW-846 Method 9056	28 days
pH			Immediate
Phosphorous, Total			28 days
Potassium, Total			6 months

FACILITY NAME: \_\_\_\_\_ NJPDES PERMIT NO.: \_\_\_\_\_

(new applicants leave blank)

Selenium, Total			6 months
Zinc, Total			6 months
Water Extractable Phosphorus		Universal Water Extractable P Test for Manure and Biosolids (adapted from Kleinman et al. 2007)	3 weeks

## PART C: CERTIFICATION

**Read and submit the following certification statement with this application:**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with the system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for purposely, knowingly, recklessly, or negligently submitting false information.

Signature of Officer: \_\_\_\_\_

Name of Officer: \_\_\_\_\_  
(Type or print)

Official Title: \_\_\_\_\_

Telephone Number: (\_\_\_\_) \_\_\_\_\_

Date Signed: \_\_\_\_\_