

# Permit Fact Sheet

## General Information

|                                  |  |
|----------------------------------|--|
| Permit Number:                   | WI-0064653-02-1  |
| Permittee Name:                  | WALTER & SON WASTE HAULING LLC   |
| Address:                         | N3368 STATE RD 14  |
| City/State/Zip:                  | DARIEN WI 53114  |
| Discharge Location:              | Approved sites in primarily Walworth County                              |
| Receiving Water:                 | Groundwaters of the State via landspreading in primarily Walworth County |
| StreamFlow (Q <sub>7,10</sub> ): | NA   |
| Stream Classification:           | NA   |

## Facility Description

Walter & Son Waste Hauling (WSH) headquarters is located in Darien, Wisconsin (Walworth County). This facility provides short term storage and land application of industrial wastewater, industrial sludge, municipal sludge, and septage wastes (septic, holding tank, and grease interceptor wastes) for numerous municipalities, industries, and confidential clients. Currently, WSH has 61 fields (approximately 2400 acres) approved for the land application of industrial wastewater and combined waste. Municipal biosolids, septage, industrial sludge and industrial wastewaters are combined in WSH's Slurrystore #1. WSH's approved sites/fields are located in Walworth county.

Each site/field must comply with ss. NR 113.07, NR 204.07, NR 214.17, and/or NR 214.18 Wisconsin Administrative Code requirements for 1) separation distance from houses and wells, 2) separation distance from surface water and wetlands, 3) separation distance from bedrock and groundwater, and 4) soil permeability rate (sufficient to properly hold and treat the wastewater).

Winter time land application (winter and/or frozen soil) of ch. NR 214 Wis. Adm. Code wastewater is permissible for sites/fields meeting the above conditions and that have slopes less than 2% or on a case by case basis 2-6%, per ss.NR 214.17(2)(f) and 214.18(2)(f), Wis. Adm. Codes. No winter land application is permitted from WSH's Main Tank because it contains mixed wastes including municipal biosolids, septage/holding tank/grease trap wastes, and industrial wastes. No winter land application is permitted from WSH's municipal land application outfalls. When soil temperatures are above freezing, all land application is limited to slopes of 12% or less.

### Storage Structures

WSH currently owns one above-ground storage structure located in Walworth County (Slurrystore #1, Outfall 001). The current capacity is 3 million gallons. The waste receiving pit (influent discharge location for WSH's Slurrystore #1) is enclosed in order to minimize nuisance odors. This tank has been previously approved by the Wisconsin Department of Natural Resources in accordance with chs. NR 213 and NR110, Wis. Adm. Code. Wastewaters from various industrial, municipal, and septage (septage, holding, and grease interceptor tanks) clients are mixed in this tank.

WSH has a cake storage pad that holds sewage cake sludge (Outfall 002). Placeholders have been added to the proposed permit for outfall sample points. These sample points must be approved by the Department prior to use.

WSH must submit plans and specifications to the Department for review and approval prior to any new tank or storage structure being used to store wastewater under this WPDES permit.

| Tank/ Pad           | Outfall | Tank Type        | Waste Stored           | Capacity             | TRS                 | Q/Q         | Township | Manure Stored? |
|---------------------|---------|------------------|------------------------|----------------------|---------------------|-------------|----------|----------------|
| Slurrystore #1      | 001     | Steel Glass Tank | NR 113, NR 204, NR 214 | 3.0 MG               | 2N, 15E, Section 21 | SE1/4 SE/14 | Darien   | No             |
| Cake Pad #1         | 002     | Concrete Pad     | NR 204                 | 1800 yd <sup>3</sup> | 2N, 15E, Section 21 | SE1/4 SE/14 | Darien   | No             |
| Slurrystore #2 (PH) | 005     | Steel Glass Tank | NR 214                 | 1.8 MG               | 2N, 15E, Section 21 | SW1/4 SE/14 | Darien   | No             |
| Cake Pad #2 (PH)    | 006     | Concrete Pad     | NR 204, NR 214         | 1450 yd <sup>3</sup> | 2N, 15E, Section 21 | SW1/4 SE/14 | Darien   | Yes            |

A sample point, labeled as ‘Outfall’, has been designated for the tank to track the land application of wastes from that discharge location. Wastewater is comingled and then land applied. Wastewater is typically injected via drag line system on Department approved sites/fields. Details on each storage tank/pad are provided below.

“PH” means “Placeholder”

“M” in an outfall title means an outfall contains Municipal wastes, also referred to as sewage sludge.

“I” in an outfall title means an outfall contains Industrial wastes.

“S” in an outfall title means an outfall contains Septage wastes.

A gray box (as seen above) in a table indicates a change from the previous permit.

## 1 Influent - Proposed Monitoring

### 1.1 Sampling Point(s)

| Sample Point Designation |   |  |
|--------------------------|---|--|
| Sample Point Number      | Discharge Flow, Units, and Averaging Period | Sample Point Location, WasteType/sample Contents and Treatment Description (as applicable)   |
| 701                      |   | Inflow to Storage of Liquid Industrial Wastewater from Pet Factory   |
| 702                      |   | Inflow to Storage of Liquid Industrial Wastewater from Dean Foods - Harvard  |
| 703                      |   | Inflow to Storage of Liquid Industrial Wastewater from Land Management Inc.'s Leachate Control Structure (Storage Pad - See Outfall 010 of WPDES WI-0057720) |
| 704                      |   | Inflow to Storage of Liquid Industrial Sludge from Kemp Foods  |
| 705                      |   | Inflow to Storage of Liquid Industrial Wastewater from Axiom Foods   |
| 706                      |   | Inflow to Storage of Liquid Industrial Wastewater from Mars Chocolate  |

| <b>Sample Point Designation</b> |  |  |
|---------------------------------|--|--|
| <b>Sample Point Number</b>      | <b>Discharge Flow, Units, and Averaging Period</b> | <b>Sample Point Location, WasteType/sample Contents and Treatment Description (as applicable)</b>          |
| 707                             |  | Inflow to Storage of Liquid Industrial Wastewater from Z Trim  |
| 708                             |  | Inflow to Storage of Liquid Industrial Wastewater from Bytec Confidential Client 620                       |
| 709                             |  | Inflow to Storage of Liquid Industrial Wastewater from Bytec Confidential Client 622                       |
| 710                             |  | Inflow to Storage of Liquid Industrial Wastewater from Bytec Confidential Client 632                       |
| 711                             |  | Inflow to Storage of Liquid Industrial Wastewater from Bytec Confidential Client 633                       |
| 712                             |  | Inflow to Storage of Liquid Industrial Wastewater from Bytec Confidential Client 650                       |
| 713                             |  | Inflow to Storage of Liquid Industrial Wastewater from Bytec Confidential Client 665                       |
| 714                             |  | Inflow to Storage of Liquid Industrial Wastewater from Grande Cheese (formally PGP International)          |
| 715                             |  | Inflow to Storage of Liquid Industrial Wastewater from Bytec Confidential Client 625                       |
| 716                             |  | Inflow to Storage of Liquid Industrial Sludges from Aveca/ Little Sioux.                                   |
| 717                             |  | Inflow to Slurrystore #1 of Liquid Municipal biosolids from Evansville WWTP                                |
| 718                             |  | Inflow to Storage of Industrial Wastewater from Bytec Resource Management's Confidential Client 682        |
| 719                             |  | Inflow to Storage of Industrial Wastewater from Bytec Resource Management's Confidential Client 648        |
| 720                             |  | Inflow to Storage of Industrial Wastewater from Bytec Resource Management's Confidential Client 639        |
| 721                             |  | Inflow to Storage of Industrial Wastewater from Bytec Resource Management's Confidential Client 647        |
| 722                             |  | Inflow to Storage of Industrial Wastewater from Bytec Resource Management's Confidential Client 655        |
| 723                             |  | Inflow to Storage of Liquid Industrial Wastewater from Bytec Resource Management's Confidential Client 649 |
| 724                             |  | Inflow to Storage of Industrial Wastewater from Bytec Resource Management's Confidential Client 651        |

| <b>Sample Point Designation</b> |  |   |
|---------------------------------|--|---|
| <b>Sample Point Number</b>      | <b>Discharge Flow, Units, and Averaging Period</b> | <b>Sample Point Location, WasteType/sample Contents and Treatment Description (as applicable)</b>                   |
| 725                             |  | Inflow to Storage of Mixed Industrial Wastewater from Bytec Resource Management's Argyle Storage Tank (Outfall 001) |
| 726                             |  | Inflow to Storage of Mixed Industrial Wastewater from Bytec Resource Management's Argyle Storage Tank (Outfall 021) |
| 727                             |  | Inflow to Storage of Industrial Wastewater from Bytec Resource Management's Confidential Client #640.               |
| 728                             |  | Inflow to Storage of Industrial Wastewater from Bytec Resource Management's Confidential Client #673.               |
| 729                             |  | Inflow to Storage of Industrial Sludge from Byted Resource Management's confidential client #631.                   |
| 730                             |  | Inflow to Slurrystore #1 of Septic Tank Waste   |
| 731                             |  | Inflow to Slurrystore #1 of Holding Tank Wastes   |
| 732                             |  | Inflow to Slurrystore #1 of Grease Trap Wastes  |
| 733                             |  | Inflow to Storage of Municipal Cake Sludge from Sun Prairie WWTF.   |
| 736                             |  | Inflow to Slurrystore #1 of Leachate from WSH Cake Pad #1 (Sewage Liquid Sludge).                                   |
| 737                             |  | Inflow to Storage of Wastewater from Bytec Resource Management Confidential Client #600.                            |
| 738                             |  | Inflow to Storage of Industrial Liquid Wastewater from Brewster Cheese - Stockton Plant                             |
| 739                             |  | Inflow to Storage of Liquid Industrial Wastewater from Bytec Confidential Client 660                                |
| 740                             |  | Inflow to Storage of Liquid Industrial Wastewater from Bytec Confidential Client 694                                |
| 741                             |  | Inflow to Storage of Liquid Industrial Wastewater from Bytec Confidential Client 637                                |
| 742                             |  | Inflow to Storage of Liquid Industrial Wastewater from Bytec Confidential Client 650                                |
| 743                             |  | Inflow to Storage of Liquid Industrial Wastewater from Bytec Confidential Client 654                                |
| 744                             |  | Inflow to Storage of Liquid Industrial Wastewater from Bytec Confidential Client 687                                |
| 745                             |  | Inflow to Storage of Liquid Industrial Wastewater from Bytec Confidential Client 627                                |

| <b>Sample Point Designation</b> |  |   |
|---------------------------------|--|---|
| <b>Sample Point Number</b>      | <b>Discharge Flow, Units, and Averaging Period</b> | <b>Sample Point Location, WasteType/sample Contents and Treatment Description (as applicable)</b>           |
| 746                             |  | Inflow to Storage of Liquid Industrial Wastewater from Bytec Confidential Client 636                        |
| 747                             |  | Inflow to storage of Liquid Industrial Wastewater from Bytec Confidential Client #635                       |
| 748                             |  | Inflow to Storage of municipal sludge from the Village of Ridgeway WWTP                                     |
| 749                             |  | Inflow to Storage of Liquid Industrial Wastewater from Dancing Goat Distillery                              |
| 750                             |  | Inflow to Storage of Liquid Industrial Wastewater from Bytec Confidential Client 610.                       |
| 751                             |  | Inflow to Storage of Industrial Wastewater from Bytec Confidential Client 627                               |
| 752                             |  | Inflow to Storage of Liquid Industrial Wastewater from Agrifiber Solutions                                  |
| 753                             |  | Inflow to Storage of Industrial Wastewater from Bytec Confidential Client 637.                              |
| 754                             |  | Inflow to Storage of Industrial Wastewater from Bytec Confidential Client 693                               |
| 755                             |  | Inflow to Storage of Industrial Wastewater from AgroPur Inc.  |
| 756                             |  | Inflow to storage of industrial liquid waste from Bytec Confidential Client #684 (Industrial Liquid Waste). |
| 757                             |  | Inflow to storage of process grease from Johnsonville Sausage (Industrial Liquid Sludge).                   |
| 758                             |  | Inflow to storage of industrial liquid waste from M&J Industrial-Unilever (Industrial Liquid Waste).        |
| 801                             |  | Inflow to Slurrystore #1 of Liquid Municipal Biosolids from Beloit WWTF.                                    |
| 802                             |  | Inflow to Slurrystore #1 of Liquid Municipal Biosolids from Sharon WWTP                                     |
| 805                             |  | Inflow to Slurrystore #1 of Liquid Municipal Biosolids from Clinton WWTF                                    |
| 806                             |  | Inflow to Slurrystore #1 of Liquid Municipal Biosolids from Libertyville WWTF                               |
| 807                             |  | Inflow to Slurrystore #1 of Liquid Municipal Biosolids from Johnson Creek WWTF                              |

| <b>Sample Point Designation</b> |  |  |
|---------------------------------|--|--|
| <b>Sample Point Number</b>      | <b>Discharge Flow, Units, and Averaging Period</b> | <b>Sample Point Location, WasteType/sample Contents and Treatment Description (as applicable)</b>                                |
| 808                             |  | Inflow to Slurrystore #1 of Liquid Municipal Biosolids from Orfordville WWTF   |
| 809                             |  | Inflow to storage pad of municipal cake sludge from East Troy WWTP   |
| 810                             |  | Inflow to storage of municipal cake sludge from City of Brookfield WWTF  |
| 811                             |  | Inflow to cake pad storage of municipal cake sludge from Edgerton WWTF.  |
| 812                             |  | Inflow to Slurrystore #1 of liquid municipal sludge from Valley Ridge Clean Water Commission.                                    |
| 813                             |  | Inflow to Slurrystore #1 of sewage liquid sludge from Juneau WWTF (Sewage Liquid Sludge).  |
| 814                             |  | Inflow to Slurrystore #1 of sewage liquid sludge from Sun Prairie WWTP (Sewage Liquid Sludge).                                   |
| 815                             |  | Inflow to Slurrystore #1 of sewage liquid sludge from Rosendale WWTP (Sewage Liquid Sludge).                                     |
| 816                             |  | Inflow to Slurrystore #1 of leachate from Cake Pad #2 (Industrial Liquid Waste, Industrial Liquid Sludge, Sewage Liquid Sludge). |

## **1.2 New Waste Stream Requirements**

### **Changes from Previous Permit:**

No changes.

## **1.3 Monitoring Requirements**

**1.3.1 Sample Point Number: 701- Pet Factory; 702- Dean Foods - Harvard; 703- WW Trucking Paunch Leachate; 704- Kemp Foods ; 705- Axiom Foods; 706- Mars Chocolate; 707- Z Trim; 708- Bytec Confidential Client 620; 709- Bytec Confidential Client 622; 710- Bytec Confidential Client 632 ; 711- Bytec Confidential Client 633; 712- Bytec Confidential Client 650; 713- Bytec Confidential Client 665; 714- Grande Cheese - PGP; 715- Bytec Confidential Client 625; 716- Aveca/ Little Sioux Sludges; 717- Evansville WWTP; 718- Bytec Confidential Client 682; 719- Bytec Confidential Client 648; 720- Bytec Confidential Client 639; 721- Bytec Confidential Client 647; 722- Bytec Confidential Client 655; 723- Bytec Confidential Client 649; 724- Bytec Confidential Client 651; 725- Bytec Storage Outfall 001; 726- Bytec Storage Outfall 021; 727- Bytec Confidential Client 640; 728- Bytec Confidential Client 673; 729- Bytec Confidential Client 631; 737- Bytec Confidential Client 600; 738- Brewster Cheese (IL); 739- Bytec Confidential Client 660; 740- Bytec Confidential Client 694; 741- Bytec Confidential Client 637; 742- Bytec Confidential Client 650; 743- Bytec Confidential Client 654; 744- Bytec Confidential Client 687; 745- Bytec Confidential Client 627; 746- Bytec Confidential Client 636; 747- Bytec Confidential Client 635; 748- Ridgeway WWTP; 749- Dancing Goat Distillery ; 750- Bytec Confidential Client 610; 751- Bytec Confidential Client 627; 752- Agrifiber Solutions; 753- Bytec Confidential Client 637; 754- Bytec Confidential Client 693; 755- AgroPur Inc.; 756- Bytec Confidential Client 684; 757- Johnsonville Sausage; 758- M&J Industrial-Unilever; 801- Beloit WWTF; 802- Sharon WWTP ; 805- Clinton WWTF Mun Sludge; 806- Libertyville WWTF Mun Sludge; 807- Johnson Creek WWTF; 808- Orfordville WWTF; 812- Valley Ridge Clean Water Comm; 813- Juneau WWTF; 814- Sun Prairie WWTP, and 815- Rosendale WWTP**

| Monitoring Requirements and Limitations |            |                 |                  |             |       |
|---|------------|-----------------|------------------|-------------|-------|
| Parameter                               | Limit Type | Limit and Units | Sample Frequency | Sample Type | Notes |
| Flow Rate                               |            | gpd             | Daily            | Estimated   |       |

**Changes from Previous Permit:**

The following liquid waste sampling points were added to this section: 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 812, 813, 814, and 815 (approved clients since permit reissuance).

**1.3.2 Sample Point Number: 730- Septic Tank Waste; 731- Holding Tank Waste; 732- Grease Trap Wastes**

| Monitoring Requirements and Limitations |            |                 |                  |             |                |
|---|------------|-----------------|------------------|-------------|----------------|
| Parameter                               | Limit Type | Limit and Units | Sample Frequency | Sample Type | Notes          |
| Flow Rate                               |            | gpd             | Daily            | Estimated   | Septage Wastes |

**Changes from Previous Permit:**

No changes.

**1.3.3 Sample Point Number: 733- Sun Prairie Cake Sludge; 809- Bytec Confidential Client 901; 810- City of Brookfield WWTF; 811- Edgerton WWTF**

| <b>Monitoring Requirements and Limitations</b> |                   |                        |                         |                    |  |
|--|-------------------|------------------------|-------------------------|--------------------|--|
| <b>Parameter</b>                               | <b>Limit Type</b> | <b>Limit and Units</b> | <b>Sample Frequency</b> | <b>Sample Type</b> | <b>Notes</b>   |
| Volume   |                   | lbs/day                | Daily                   | Estimated          | Sewage Cake Sludge, Industrial Cake Sludge, or By-Product Solids |

**Changes from Previous Permit:**

Sampling points 733, 809, 810, and 811 were all added to this section (approved clients since permit reissuance).

**1.3.4 Sample Point Number: 736- Leachate from Cake Pad #1 and 816- Leachate from Cake Pad #2**

| <b>Monitoring Requirements and Limitations</b> |                   |                        |                         |                    |                           |
|--|-------------------|------------------------|-------------------------|--------------------|---------------------------|
| <b>Parameter</b>                               | <b>Limit Type</b> | <b>Limit and Units</b> | <b>Sample Frequency</b> | <b>Sample Type</b> | <b>Notes</b>              |
| Flow Rate                                      |                   | gal/month              | Monthly                 | Estimated          | Leachate generated onsite |

**Changes from Previous Permit:**

Sampling point 816 added to track leachate from Cake Pad #2.

## 2 Land Application

### 2.1 Sampling Point(s)

| Sample Point Designation |   |   |
|--------------------------|---|---|
| Sample Point Number      | Discharge Flow, Units, and Averaging Period | Sample Point Location, WasteType/sample Contents and Treatment Description (as applicable)  |
| 001                      |   | Land Application of Mixed Municipal Sludge, Industrial Wastewater, Industrial Sludge, and Septage Wastes from Steel, Glass Lined Tank designated as Slurrystore #1. Location: 2N, 15E, Section 21 SE1/4, SW1/4.   |
| 002                      |   | Land Application of Sewage Cake Sludge from Cake Pad #1. Location: 2N, 15E, Section 21 SE1/4, SW1/4 (Sewage Cake Sludge).   |
| 005                      | Placeholder Outfall.                        | Land application of mixed industrial liquid waste and industrial liquid sludge from the tank known as Slurrystore #2. Location: 2N, 15E, Section 21 SE1/4, SW1/4 (Industrial Liquid Waste, Industrial Liquid Sludge). PLACEHOLDER: DEPARTMENT APPROVAL REQUIRED PRIOR TO USE.   |
| 006                      | Placeholder Outfall.                        | Land Application of mixed sewage cake sludge, industrial cake sludge, by-product solids, and non-CAFO manure from the cake pad located at 2N, 15E, Section 21 SE1/4, SW1/4 (Sewage Cake Sludge, Industrial Cake sludge, Industrial By-Product Solids, non-CAFO Manure). PLACEHOLDER: DEPARTMENT APPROVAL REQUIRED PRIOR TO USE. |
| 601                      |   | Direct Land Application of Industrial Wastewater from Pet Factory   |
| 602                      |   | Direct Land Application of Industrial Wastewater from Dean Foods - Harvard  |
| 604                      |   | Direct Land Application of Industrial Sludge from Kemp Foods  |
| 605                      |   | Direct Land Application of Industrial Wastewater from Axiom Foods   |
| 606                      |   | Direct Land Application of Industrial Wastewater from Mars Chocolate  |
| 607                      |   | Direct Land Application of Industrial Wastewater from Z Trim  |

#### Changes from Previous Permit:

In addition to the two placeholder outfalls which were added, outfalls 003 and 004 were removed due to the fact that WSH indicated they would not be used.

## 2.2 Monitoring Requirements and Limitations

### 2.2.1 Sample Point Number: 001- Slurrystore #1 (M+I+S)

| Monitoring Requirements and Limitations      |              |                 |                  |             |  |
|--|--------------|-----------------|------------------|-------------|--|
| Parameter                                    | Limit Type   | Limit and Units | Sample Frequency | Sample Type | Notes  |
| Solids, Total                                |              | Percent         | Weekly           | Composite   | Septage, Sewage Liquid Sludge, Industrial Liquid Waste, and Industrial Liquid Sludge |
| Arsenic Dry Wt                               | Ceiling      | 75 mg/kg        | Quarterly        | Composite   |  |
| Arsenic Dry Wt                               | High Quality | 41 mg/kg        | Quarterly        | Composite   |  |
| Cadmium Dry Wt                               | Ceiling      | 85 mg/kg        | Quarterly        | Composite   |  |
| Cadmium Dry Wt                               | High Quality | 39 mg/kg        | Quarterly        | Composite   |  |
| Copper Dry Wt                                | Ceiling      | 4,300 mg/kg     | Quarterly        | Composite   |  |
| Copper Dry Wt                                | High Quality | 1,500 mg/kg     | Quarterly        | Composite   |  |
| Lead Dry Wt                                  | Ceiling      | 840 mg/kg       | Quarterly        | Composite   |  |
| Lead Dry Wt                                  | High Quality | 300 mg/kg       | Quarterly        | Composite   |  |
| Mercury Dry Wt                               | Ceiling      | 57 mg/kg        | Quarterly        | Composite   |  |
| Mercury Dry Wt                               | High Quality | 17 mg/kg        | Quarterly        | Composite   |  |
| Molybdenum Dry Wt                            | Ceiling      | 75 mg/kg        | Quarterly        | Composite   |  |
| Nickel Dry Wt                                | Ceiling      | 420 mg/kg       | Quarterly        | Composite   |  |
| Nickel Dry Wt                                | High Quality | 420 mg/kg       | Quarterly        | Composite   |  |
| Selenium Dry Wt                              | Ceiling      | 100 mg/kg       | Quarterly        | Composite   |  |
| Selenium Dry Wt                              | High Quality | 100 mg/kg       | Quarterly        | Composite   |  |
| Zinc Dry Wt                                  | Ceiling      | 7,500 mg/kg     | Quarterly        | Composite   |  |
| Zinc Dry Wt                                  | High Quality | 2,800 mg/kg     | Quarterly        | Composite   |  |
| Nitrogen, Total Kjeldahl                     |              | mg/L            | Weekly           | Composite   |  |
| Nitrogen, Ammonia (NH <sub>3</sub> -N) Total |              | mg/L            | Weekly           | Composite   |  |
| Phosphorus, Total                            |              | mg/L            | Weekly           | Composite   |  |
| Phosphorus, Water Extractable                |              | mg/L            | Quarterly        | Composite   |  |
| Potassium, Total                             |              | mg/L            | Weekly           | Composite   |  |

| <b>Monitoring Requirements and Limitations</b> |                   |                        |                         |                    |              |
|--|-------------------|------------------------|-------------------------|--------------------|--------------|
| <b>Parameter</b>                               | <b>Limit Type</b> | <b>Limit and Units</b> | <b>Sample Frequency</b> | <b>Sample Type</b> | <b>Notes</b> |
| Recoverable                                    |                   |                        |                         |                    |              |
| Chloride                                       |                   | mg/L                   | Weekly                  | Composite          |              |
| COD  |                   | mg/L                   | Monthly                 | Composite          |              |
| pH Field                                       |                   | su                     | Weekly                  | Grab               |              |
| Fecal Coliform                                 |                   | MPN/g TS               | Quarterly               | Composite          |              |
| Radium 226 Dry Wt                              |                   | pCi/g                  | Annual                  | Composite          |              |

### **Changes from Previous Permit:**

No changes.

### **2.2.2 Sample Point Number: 002- Cake Pad #1 (M)**

| <b>Monitoring Requirements and Limitations</b> |                   |                        |                         |                    |                    |
|--|-------------------|------------------------|-------------------------|--------------------|--------------------|
| <b>Parameter</b>                               | <b>Limit Type</b> | <b>Limit and Units</b> | <b>Sample Frequency</b> | <b>Sample Type</b> | <b>Notes</b>       |
| Solids, Total                                  |                   | Percent                | Quarterly               | Composite          | Sewage Cake Sludge |
| Arsenic Dry Wt                                 | Ceiling           | 75 mg/kg               | Quarterly               | Composite          |                    |
| Arsenic Dry Wt                                 | High Quality      | 41 mg/kg               | Quarterly               | Composite          |                    |
| Cadmium Dry Wt                                 | Ceiling           | 85 mg/kg               | Quarterly               | Composite          |                    |
| Cadmium Dry Wt                                 | High Quality      | 39 mg/kg               | Quarterly               | Composite          |                    |
| Copper Dry Wt                                  | Ceiling           | 4,300 mg/kg            | Quarterly               | Composite          |                    |
| Copper Dry Wt                                  | High Quality      | 1,500 mg/kg            | Quarterly               | Composite          |                    |
| Lead Dry Wt                                    | Ceiling           | 840 mg/kg              | Quarterly               | Composite          |                    |
| Lead Dry Wt                                    | High Quality      | 300 mg/kg              | Quarterly               | Composite          |                    |
| Mercury Dry Wt                                 | Ceiling           | 57 mg/kg               | Quarterly               | Composite          |                    |
| Mercury Dry Wt                                 | High Quality      | 17 mg/kg               | Quarterly               | Composite          |                    |
| Molybdenum Dry Wt                              | Ceiling           | 75 mg/kg               | Quarterly               | Composite          |                    |
| Nickel Dry Wt                                  | Ceiling           | 420 mg/kg              | Quarterly               | Composite          |                    |
| Nickel Dry Wt                                  | High Quality      | 420 mg/kg              | Quarterly               | Composite          |                    |
| Selenium Dry Wt                                | Ceiling           | 100 mg/kg              | Quarterly               | Composite          |                    |
| Selenium Dry Wt                                | High Quality      | 100 mg/kg              | Quarterly               | Composite          |                    |
| Zinc Dry Wt                                    | Ceiling           | 7,500 mg/kg            | Quarterly               | Composite          |                    |
| Zinc Dry Wt                                    | High Quality      | 2,800 mg/kg            | Quarterly               | Composite          |                    |

| Monitoring Requirements and Limitations |            |                 |                  |             |       |
|---|------------|-----------------|------------------|-------------|-------|
| Parameter                               | Limit Type | Limit and Units | Sample Frequency | Sample Type | Notes |
| Nitrogen, Total Kjeldahl                |            | Percent         | Quarterly        | Composite   |       |
| Nitrogen, Ammonia (NH3-N) Total         |            | Percent         | Quarterly        | Composite   |       |
| Phosphorus, Total                       |            | Percent         | Quarterly        | Composite   |       |
| Phosphorus, Water Extractable           |            | % of Tot P      | Quarterly        | Composite   |       |
| Potassium, Total Recoverable            |            | Percent         | Quarterly        | Composite   |       |
| pH Field                                |            | su              | Quarterly        | Grab        |       |
| Fecal Coliform                          |            | MPN/g TS        | Quarterly        | Composite   |       |
| Radium 226 Dry Wt                       |            | pCi/g           | Annual           | Composite   |       |

**Changes from Previous Permit:**

No changes.

**2.2.3 Sample Point Number: 005- PH: Slurrystore #2 (I)**

| Monitoring Requirements and Limitations |            |                 |                  |             |   |
|---|------------|-----------------|------------------|-------------|---|
| Parameter                               | Limit Type | Limit and Units | Sample Frequency | Sample Type | Notes   |
| Solids, Total                           |            | Percent         | Weekly           | Composite   | Industrial Liquid Waste, Industrial Liquid Sludge |
| Nitrogen, Total Kjeldahl                |            | mg/L            | Weekly           | Composite   |   |
| Nitrogen, Ammonia (NH3-N) Total         |            | mg/L            | Weekly           | Composite   |   |
| Chloride                                |            | mg/L            | Weekly           | Composite   |   |
| Phosphorus, Total                       |            | mg/L            | Weekly           | Composite   |   |
| Phosphorus, Water Extractable           |            | % of Tot P      | Quarterly        | Composite   |   |
| Potassium, Total Recoverable            |            | mg/L            | Weekly           | Composite   |   |
| pH Field                                |            | su              | Weekly           | Grab        |   |
| COD                                     |            | mg/L            | Monthly          | Composite   |   |

**Changes from Previous Permit:**

New outfall. Slurrystore #2 was approved (Approval #S-2020-0449A) in accordance with s. NR 110 and s. NR 213, Wis. Adm. Codes to store Septage, Sewage Sludge, and Industrial Waste. However, the permittee wishes to utilize this storage tank for just industrial waste. Therefore, this permit only authorizes industrial waste is stored in this tank. Should the permittee wish to commingle septage and/or sewage sludge in this storage tank, this permit must be modified to include those sampling parameters.

### Explanation of Limits and Monitoring Requirements

Monitoring frequency and the types of sampling parameters are included based on statewide requirements for all contract haulers and anticipated frequency of use based on the volume of waste that this permittee receives. Winter land application is authorized through this outfall, in accordance with ch. NR 214, Wis. Adm. Code.

Upon completion of construction, WSH must obtain department approval prior to land applying waste from Outfall 005.

#### 2.2.4 Sample Point Number: 006- PH: Cake Pad #2 (M+I)

| Monitoring Requirements and Limitations |              |                 |                  |             |   |
|---|--------------|-----------------|------------------|-------------|---|
| Parameter                               | Limit Type   | Limit and Units | Sample Frequency | Sample Type | Notes   |
| Solids, Total                           |              | Percent         | Quarterly        | Composite   | Sewage Cake Sludge, Industrial Cake Sludge, By-Product Solids, and non-CAFO manure. |
| Arsenic Dry Wt                          | Ceiling      | 75 mg/kg        | Quarterly        | Composite   |   |
| Arsenic Dry Wt                          | High Quality | 41 mg/kg        | Quarterly        | Composite   |   |
| Cadmium Dry Wt                          | Ceiling      | 85 mg/kg        | Quarterly        | Composite   |   |
| Cadmium Dry Wt                          | High Quality | 39 mg/kg        | Quarterly        | Composite   |   |
| Copper Dry Wt                           | Ceiling      | 4,300 mg/kg     | Quarterly        | Composite   |   |
| Copper Dry Wt                           | High Quality | 1,500 mg/kg     | Quarterly        | Composite   |   |
| Lead Dry Wt                             | Ceiling      | 840 mg/kg       | Quarterly        | Composite   |   |
| Lead Dry Wt                             | High Quality | 300 mg/kg       | Quarterly        | Composite   |   |
| Mercury Dry Wt                          | Ceiling      | 57 mg/kg        | Quarterly        | Composite   |   |
| Mercury Dry Wt                          | High Quality | 17 mg/kg        | Quarterly        | Composite   |   |
| Molybdenum Dry Wt                       | Ceiling      | 75 mg/kg        | Quarterly        | Composite   |   |
| Nickel Dry Wt                           | Ceiling      | 420 mg/kg       | Quarterly        | Composite   |   |
| Nickel Dry Wt                           | High Quality | 420 mg/kg       | Quarterly        | Composite   |   |
| Selenium Dry Wt                         | Ceiling      | 100 mg/kg       | Quarterly        | Composite   |   |
| Selenium Dry Wt                         | High Quality | 100 mg/kg       | Quarterly        | Composite   |   |
| Zinc Dry Wt                             | Ceiling      | 7,500 mg/kg     | Quarterly        | Composite   |   |
| Zinc Dry Wt                             | High Quality | 2,800 mg/kg     | Quarterly        | Composite   |   |
| Nitrogen, Total                         |              | Percent         | Quarterly        | Composite   |   |

| Monitoring Requirements and Limitations |            |                 |                  |             |       |
|---|------------|-----------------|------------------|-------------|-------|
| Parameter                               | Limit Type | Limit and Units | Sample Frequency | Sample Type | Notes |
| Kjeldahl                                |            |                 |                  |             |       |
| Nitrogen, Ammonia (NH3-N) Total         |            | Percent         | Quarterly        | Composite   |       |
| Phosphorus, Total                       |            | Percent         | Quarterly        | Composite   |       |
| Phosphorus, Water Extractable           |            | % of Tot P      | Quarterly        | Composite   |       |
| Potassium, Total Recoverable            |            | Percent         | Quarterly        | Composite   |       |
| COD                                     |            | Percent         | Quarterly        | Composite   |       |
| pH Field                                |            | su              | Quarterly        | Grab        |       |
| Chloride                                |            | Percent         | Quarterly        | Composite   |       |
| Fecal Coliform                          |            | MPN/g TS        | Quarterly        | Composite   |       |
| Radium 226 Dry Wt                       |            | pCi/g           | Annual           | Composite   |       |

### Changes from Previous Permit:

New outfall. Cake Pad #2 was approved (Approval #S-2020-0449A) in accordance with chs. NR 110 and NR 213, Wis. Adm. Codes, to store Sewage Cake Sludge, Industrial Cake Sludge, and By-Product Solids. Manure may also be stored in this structure if it does not originate from a Concentrated Animal Feeding Operation (CAFO).

### Explanation of Limits and Monitoring Requirements

All monitoring requirements/frequencies are standard for commingled cake sludge/by-product solids throughout the State. Winter land application is not authorized through this outfall. Upon completion of construction, WSH must obtain department approval prior to land applying waste from Outfall 006.

### 2.2.5 Sample Point Number: 601- Direct Land - Pet Factory; 602- Direct Land Dean Foods Harvard; 605- Direct Land Axium Foods; 606- Direct Land Mars Chocolate, and 607- Direct Land Z Trim

| Monitoring Requirements and Limitations |            |                 |                  |             |  |
|---|------------|-----------------|------------------|-------------|--|
| Parameter                               | Limit Type | Limit and Units | Sample Frequency | Sample Type | Notes  |
| Nitrogen, Total Kjeldahl                |            | mg/L            | Quarterly        | Grab        | Direct Land Application: Industrial Liquid Waste and/or Industrial Liquid Sludge |
| Phosphorus, Total                       |            | mg/L            | Quarterly        | Grab        |  |
| COD                                     |            | mg/L            | Quarterly        | Grab        |  |
| Chloride                                |            | mg/L            | Quarterly        | Grab        |  |

| Monitoring Requirements and Limitations |            |                 |                  |             |       |
|---|------------|-----------------|------------------|-------------|-------|
| Parameter                               | Limit Type | Limit and Units | Sample Frequency | Sample Type | Notes |
| pH Field                                |            | su              | Quarterly        | Grab        |       |
| Nitrogen, Ammonia (NH3-N) Total         |            | mg/L            | Quarterly        | Grab        |       |
| Potassium, Total Recoverable            |            | mg/L            | Quarterly        | Grab        |       |
| Phosphorus, Water Extractable           |            | mg/L            | Quarterly        | Grab        |       |

**Changes from Previous Permit:**

No changes.

**2.2.6 Sample Point Number: 604- Direct Land Kemp Foods**

| Monitoring Requirements and Limitations |            |                 |                  |             |  |
|---|------------|-----------------|------------------|-------------|--|
| Parameter                               | Limit Type | Limit and Units | Sample Frequency | Sample Type | Notes  |
| Solids, Total                           |            | Percent         | Quarterly        | Grab        | Direct Land Application: Industrial Cake Sludge and/or By-Product Solids |
| Nitrogen, Total Kjeldahl                |            | Percent         | Quarterly        | Grab        |  |
| Nitrogen, Ammonia (NH3-N) Total         |            | Percent         | Quarterly        | Grab        |  |
| Chloride                                |            | Percent         | Quarterly        | Grab        |  |
| COD                                     |            | Percent         | Quarterly        | Grab        |  |
| pH Field                                |            | su              | Quarterly        | Grab        |  |
| Phosphorus, Total                       |            | Percent         | Quarterly        | Grab        |  |
| Phosphorus, Water Extractable           |            | % of Tot P      | Quarterly        | Grab        |  |
| Potassium, Total Recoverable            |            | Percent         | Quarterly        | Grab        |  |

**Changes from Previous Permit:**

No changes.

### 3 Compliance Schedules

#### 3.1 Land Application Management Plan

| Required Action   | Due Date   |
|---|------------|
| <b>Management Plan Submittal:</b> Submit an update to the management plan to optimize the land application system performance and demonstrate compliance with Section 2.4.4 of the permit (Operating Requirements/Management Plan), by the Due Date. This management plan shall 1) specify information on pretreatment processes (if any); 2) identify land application sites; 3) describe site limitations; 4) address vegetative cover management and removal; 5) specify availability of storage; 6) describe the type of transporting and spreading vehicle(s); 7) specify monitoring procedures; 8) track site loading; 9) address contingency plans for adverse weather and odor/nuisance abatement; and 10) include any other pertinent information. Once approved, all landspreading activities shall be conducted in accordance with the plan. Any changes to the plan must be approved by the Department prior to implementing the changes. | 04/01/2017 |
| <b>Update to Land Management Plan:</b> The permittee shall submit an updated land management plan to the department to show compliance with section 2.4.4 of this permit. This update shall address any changes in operations as a result of the permit modification, in addition to any operational deficiencies as identified by the permittee or the department.   | 01/01/2021 |

#### Changes from Previous Permit:

“Update to Land Management Plan” section added. This was added because, with the addition of the two new structures (005 and 006), WSH will need to amend their LMP to ensure that waste is properly managed through these structures. This update must be submitted to and subsequently approved by WSH’s department regulator.

#### Attachments:

Appendix A: Conditional Approval Letter #S-2020-0449A

#### Proposed Expiration Date:

12/31/2021 (unchanged)

#### Prepared By:

Nate Willis  
 Wastewater Engineer  
 Bureau of Water Quality

#### Date:

09/15/2020

#### cc:

Stephen Warnner, *WDNR*