



John R. Kasich, Governor  
Mary Taylor, Lt. Governor  
Scott J. Nally, Director

January 10, 2013

Re: Ohio EPA Application No. 1MP00017\*AM  
Facility Name: Bob Evans Farms, Inc.

Tom Sefton, Plant Manager  
Bob Evans Farms, Inc.  
640 Birch Road  
Xenia, OH 45385

Ladies and Gentlemen:

Transmitted herewith is one copy of the Land Application Management Plan Approval for land application of sludge from the Bob Evans Farms Wastewater Treatment Plant.

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00, made payable to "Ohio Treasurer Josh Mandel," which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission  
77 South High Street, 17<sup>th</sup> Floor  
Columbus, Ohio 43215

Sincerely,

A handwritten signature in black ink that reads "Ed Swindall". The signature is written in a cursive, flowing style.

Ed Swindall, Supervisor  
Permit Processing Unit  
Division of Surface Water

ES/sg  
Enclosure

Cc: Southwest District Office  
Greene County Combined Health Department  
Jacob Howdysell, DSW, CO



January 10, 2013

Re: Greene County

Land Application of Bob Evans Farms sludge to agricultural fields in Greene County

Application No. IMP00017\*AM

Land Application Management Plan Permit for Bob Evans Farms, Inc.

Plans Received October 25, 2011

Revised Plans Received August 15, 2012

From Manfred Eder, Bob Evans Farms, Inc.

Issue Date: January 10, 2013

Effective Date: February 1, 2013

Expiration Date: January 31, 2018

Bob Evans Farms, Inc.

Attn: Tom Sefton, Plant Manager

640 Birch Road

Xenia, OH 45385

Ladies and Gentlemen:

The Ohio Environmental Protection Agency has reviewed the land application management plan submitted pursuant to Chapter 6111 of the Ohio Revised Code. The plan is approved subject to the condition of compliance with all applicable laws, rules, regulations and all the conditions below and in Part I and/or Part II of this permit.

Pursuant to ORC 3734.02(G), the director hereby exempts Bob Evans Farms, Inc. and any recipient of this sludge under this land application management plan permit from the applicable solid waste provisions of ORC Chapter 3734 and rules adopted thereunder specific to the land application of sludge as authorized in this permit. The director has determined that granting an exemption from the applicable solid waste provisions of ORC Chapter 3734 to use sludge in the quantities and under the circumstances specifically authorized in this land application management plan permit is unlikely to adversely affect the public health or safety or the environment.

The applicant is required to submit a revised land application management plan application if the Director of the Ohio EPA deems it necessary.

The director may add, delete, or change any conditions to the land application management plan permit to protect human health or the environment.

This approval is for the land application of Bob Evans Farms sludge to agricultural fields in Greene County. All other beneficial uses must be separately approved by the Ohio EPA. Only sludge from the Bob Evans Farms Wastewater Treatment Plant (WWTP) is approved for beneficial use under this permit.

The director of the Ohio Environmental Protection Agency, or his authorized representative(s), may enter upon the premises of the site(s), including the generating facility, authorized for this plan approval for land application of the Bob Evans Farms sludge at any reasonable time for the purpose of making inspections, conducting tests, examining records or reports pertaining to the installation, modification, or operation of the land application system.

Issuance of this permit does not relieve you of the duty of complying with all applicable federal, state, and local laws, ordinances, and regulations.

The entity shall perform the proposed land application in strict accordance with the conditions in this permit and with the method of operation outlined in the land application management plan submitted to the Ohio Environmental Protection Agency. Approval of the land application management plan does not constitute assurance that the proposed operation will be in compliance with all Ohio laws and regulations. All application shall be done in compliance with all laws and rules of the Ohio Department of Agriculture, the Public Utilities Commission of Ohio and other rules and regulations.

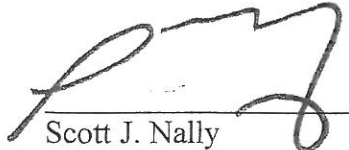
This permit and the authorization to land apply shall expire at midnight on the expiration date shown above. In order to receive authorization to land apply beyond the above date of expiration, the permittee shall submit such information and forms as are required by the Ohio EPA no later than 180 days prior to the above date of expiration.

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00, made payable to "Ohio Treasurer Josh Mandel", which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission  
77 South High Street, 17th Floor  
Columbus, Ohio 43215



Sincerely,



Scott J. Nally  
Director

SN/sg

cc: Ohio EPA Southwest District Office  
Greene County Health Department  
Jacob Howdyshell, Ohio EPA Central Office

## Part II, OTHER REQUIREMENTS

-Any unauthorized discharges to waters of the state must be reported to Ohio EPA (toll free) by calling 1-800-282-9378 within 2 hours of discovery. The director shall be notified in writing within seven days of any person discovering noncompliance with a land application management plan or an NPDES permit.

-The following records shall be maintained by Bob Evans Farms, Inc. for a minimum of 5 years and be made available to the Ohio EPA upon request:

a) A sampling plan for compliance with monitoring requirements as set forth in the approved management plan submitted on October 25, 2011 detailing where samples of the Bob Evans Farms sludge are to be collected from, how those samples are to be collected, and what those samples are to be analyzed for;

b) All laboratory reports of all characterizations of the sludge performed by Bob Evans Farms, Inc.;

c) Records of the amount of Bob Evans Farms sludge produced;

d) Records of the direct recipients of the Bob Evans Farms sludge; and

e) Records of the amount of Bob Evans Farms sludge provided for beneficial use.

-By January 31 of each year, Bob Evans Farms, Inc. shall prepare and submit a report detailing the beneficial use activities involving the sludge for the previous calendar year. The annual report shall contain:

A) Information detailing the amount of sludge, in dry tons, provided for beneficial use pursuant to the approved management plan in the previous calendar year, and the amount provided for each specific beneficial use;

B) Information regarding the total amount of sludge, in dry tons, produced during the previous calendar year;

C) Copies of the results of pollutant analysis of the sludge that has been completed in accordance with the approved management plan submitted on October 25, 2011.

Copies of the report shall be submitted to the Ohio EPA Division of Surface Water Central Office, PO Box 1049, Columbus, OH 43216-1049 and the Ohio EPA Division of Surface Water Southwest District Office, 401 East Fifth Street, Dayton, Ohio 45402-2911.

-The following annual certification statement shall be included with the annual report as required by this permit:

"I certify, under penalty of law, that the information contained in this annual report that will be used to determine compliance with the requirements contained in Chapters 3734. and 6111. of the Ohio Revised Code, and all rules thereunder, for the period beginning (insert date of last certification statement) and ending (insert current certification statement date) was prepared under my direction and supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate this information. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

For the first certification statement, insert the effective date of this approval as the beginning date for the certified period of time. The certification statement shall be signed by one of the following persons: In the case of a corporation, by a principal executive officer of at least the level of vice president or the principal executive officer's duly authorized representative, if such representative is responsible for the overall operation of the facility. The signature shall constitute personal affirmation that all statements or assertions of fact in the records are true and complete and comply fully with applicable state requirements and shall subject the signatory to liability under section 2921.13 of the Ohio Revised Code.

-You shall not cause pollution or cause to be placed any beneficially used Bob Evans Farms sludge in a location where it causes pollution of any waters of the state, except in accordance with an effective national pollutant discharge elimination system (NPDES) permit.

-Storage and land application of the Bob Evans Farms sludge shall be conducted in such a manner that it will not cause a nuisance. Excessive amounts of odor, or excessive amounts of the Bob Evans Farms sludge leaving the application site either by wind or water may be considered a nuisance. Should a nuisance condition develop, or a determination be made by the Ohio EPA that storage or land application of Bob Evans Farms sludge is a threat to human health or the environment, the Ohio EPA may order storage and land application of Bob Evans Farms sludge to cease at the site and may require nuisance conditions be abated.

-Notice shall be given to all end users of Bob Evans Farms sludge which states that the material is or contains an industrial byproduct that has been approved for use by the Ohio EPA.



# Bob Evans Farms, Inc (BEF)

RECEIVED  
OHIO EPA

AUG 15 2012

Southwest District



## Waste Management Plan Xenia, Ohio Facility

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INDUSTRIAL WASTE DISPOSAL

APPROVED

OHIO ENVIRONMENTAL PROTECTION AGENCY  
AS EVIDENCED BY COPY OF  
LETTER OF APPROVAL  
HERETO ATTACHED

INDUSTRIAL WASTE DISPOSAL

APPROVED

OHIO ENVIRONMENTAL PROTECTION AGENCY  
AS EVIDENCED BY COPY OF  
LETTER OF APPROVAL  
HERETO ATTACHED

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## 1 GENERAL INFORMATION

- 1.1 Name of Generator Bob Evans Farms, Inc.  
Address 3776 South High Street  
Columbus, Ohio 43207
- Administrative Offices Same as Above
- Treatment Facility 640 Birch Road  
Xenia, Ohio 45385  
(937) 372-4493
- 1.2 Industrial User's Permit Number 97-XGR-002  
(City of Xenia)
- 1.3 DAF Installation Permit Number 05-8922  
(digester unit)
- 1.4 Contracted Hauler Refer to unexecuted agreement in Appendix A
- 1.5 Areas of Application Greene
- 1.6 Agreements Written agreements shall be drawn up between  
the contracted hauler and BEF when necessary.  
An unexecuted copy of this agreement appears  
in Appendix 8
- 1.7 Regulatory Agency Ohio EPA  
Southwest District Office  
451 East Fifth Street  
Dayton, Ohio 45402  
(937) 285-6357
- 1.8 Plan Prepared by: Manfred S. Eder  
Food Products Safety Director  
BEF Food Products
- 1.9 Plan Submitted to OEPA on \_\_\_\_\_
- 1.10 Date of Approval \_\_\_\_\_



## **2 WASTE INFORMATION**

### **2.1 Waste Origin**

The Bob Evans Farms meat processing plant in Xenia, Ohio is a hog slaughtering, sausage manufacturing and food storage facility, which packages and stores its product and other foods (salads, bacon, etc.) in the coolers within the facility. The waste from the facility is generated from the general barn clean-up, washing of the animals and slaughtering.

On a daily basis, approximately 275 hogs are herded and washed, slaughtered, butchered, processed and packaged. The wastewater from this facility is flushed from the herding barns, washing areas and butchering floors into floor drains. The wastewater from the facility consists of blood, water, small pieces of meat and fat. The solids and raw waste from the processing floor are screened out with basket screens placed in the floor drains. Average daily process waste flow is 36,000 to 40,000 gallons per day (gpd). See Insert 2-1 for a complete diagram of the process flow.

Sanitary waste is discharged separately from process waste and is discharged separately from process waste and is discharged to the City of Xenia sewer system (approx. 7,000 gpd). Approximately 90% of the blood portion of this waste is also recovered and separated and hauled away by a renderer. The solids, oil and grease that float to the top are sucked off and also hauled away by a renderer (total approx. 17,000 gpd). The hog waste is also separated and hauled by a contracted hauler (approx. 2,000 gpd), with a planned hauling frequency of once per month, lasting 1 to 2 days.

### **2.2 Waste Treatment Process**

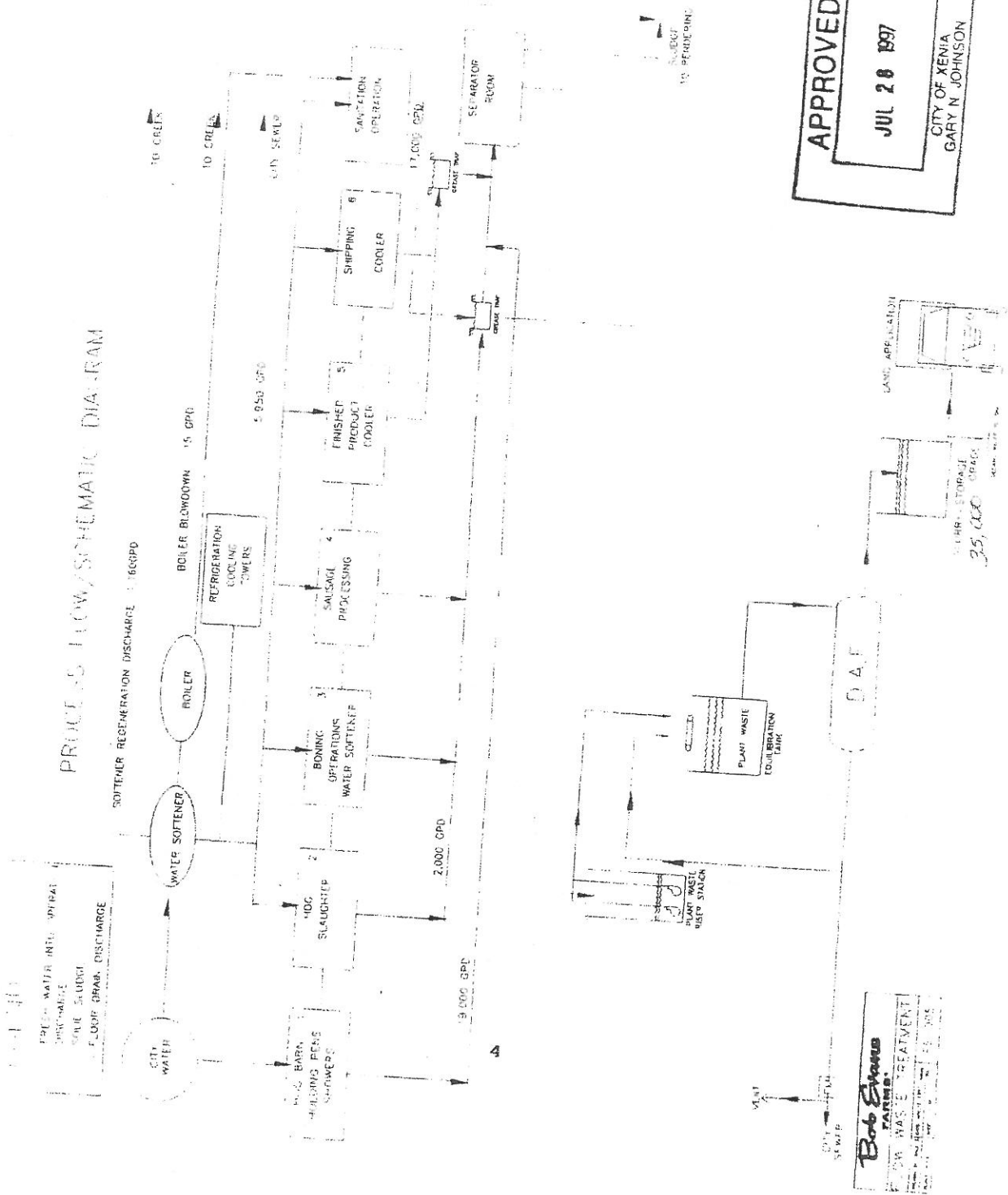
The remaining liquid (from Article 2.1, above) passes into a process sump with a capacity of 1,615 gallons and is equipped with two (2) variable speeds pumps.

The process waste is then pumped from the sump into a 10,000 gallon capacity equilibration tank. This cylindrical tank is located outside the treatment building and is equipped with a 1.6 horsepower floating mixer to keep liquid and solids uniformly mixed. Within this tank, polymers and flocculent are added to cause solids to form in order to allow the solids to be removed during the next step in the process, the dissolved air flotation system (DAF). Flow is metered from the equilibration tank in order to control loading into the DAF. The resultant sludge from this treatment process is hauled away for disposal.

The material that results from this process is an organic source, consisting mainly of liquid and the solids. The consistency of this material is liquid with approximately 4.8% solids. Estimated generation of sludge is approximately 25,000 gallons per month (approximately 300,000 gallons/year). See Insert 2-2 for a diagram of the Waste Treatment Flow Diagram.

Insert 2-1

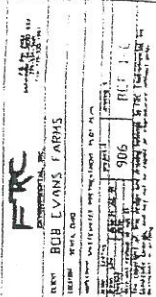
# PROCESS FLOW/SCHEMATIC DIAGRAM



**APPROVED**  
JUL 28 1997  
CITY OF XENIA  
GARY N. JOHNSON

**Bob Stone**  
PLANT WASTE TREATMENT  
FLOW RATE: 17,000 GPD  
DATE: 7/28/97

4- 7.55.002



### 2.3 Storage

A 38,000 gallon covered storage tank is located outside of the treatment building. With a weekly generation of approximately 5,000 this tank will provide storage for 45 days. Additional storage, if needed can be supplied by the use of portable rental storage tanks, each 20,000 gallon capacity and can supply storage for an unlimited amount of time by simply bringing in more tanks. These tanks are mounted on a semi trailer and can be rented for an indefinite period of time and as many as are needed can be brought in and located on site. An aerobic state can be maintained in all storage tanks by a 19.7 braking horsepower electric motor that can infuse air into the liquid in the event the sludge has to be stored for an extended period. This gives a capability for complete aeration of a tank with an 18 ft. diameter and a 20 foot side wall or 5089 cubic feet every 15 minutes.

### 2.4 Waste Analysis

A copy of the prospective digested waste analysis is shown in insert 2-3. The typical values for oil and grease are 200,400 milligrams per kilogram (mg/kg) to 313,200 mg/kg. The maximum allowable rate of sludge application is five dry tons per acre; thus, a very light application rate of oil and grease as shown in the below calculations.

$$313,200 \text{ mg/kg} / 10,000 = 31.43\% \text{ oil and grease (O\& G)}$$

$$31.32\% \text{ of 5 tons (10,000 lbs) is 3,132 lbs (per acre)}$$

$$3,132 \text{ lbs/ acres} / 43,560 \text{ sq ft/ acre} = .072 \text{ lbs/ sq ft}$$

This equals only 1.14 ounces per square foot of oil and grease.

The oil and grease will be analyzed for these properties only if the EPA requires this as a condition of approval.



THE LEADER IN ENVIRONMENTAL TESTING

1

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.  
TestAmerica Dayton  
4738 Gateway Circle  
Dayton, OH 45440  
Tel: 800-572-9839

TestAmerica Job ID: DUI0088  
Client Project/Site: [none]  
Client Project Description: Sludge

For:  
Bob Evans Farms  
P.O. Box 44  
Xenia, OH 45385

Attn: Thomas Matson

A handwritten signature in dark ink, appearing to read "Deborah Olszowka".

---

Authorized for release by:  
09/15/2011 04:33:01 PM

Deborah Olszowka  
Dayton Senior Project Manager  
Debbie.Olszowka@testamericainc.com

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

Client: Bob Evans Farms  
Project/Site: [none]

## Client Sample Results

TestAmerica Job ID: DUI0088

2

Client Sample ID: Sludge Samples

Date Collected: 09/01/11 00:00

Date Received: 09/02/11 10:50

Lab Sample ID: DUI0088-01

Matrix: Non-aqueous

Percent Solids: 14.2

### Method: [CALC] - General Chemistry Parameters

Analyte	Result	Qualifier	RL	Unit	D	Analyst	Analyzed	Dil Fac
Potash	<195		195	mg/kg		MJW	09/09/11 21:01	5.00

### Method: SW 6010B - Total Metals

Analyte	Result	Qualifier	RL	Unit	D	Analyst	Analyzed	Dil Fac
Cadmium	<34.3		34.3	mg/kg dry		MJW	09/09/11 21:01	5.00
Calcium	20000		1140	mg/kg dry		MJW	09/09/11 21:01	5.00
Chromium	46.0		45.7	mg/kg dry		MJW	09/09/11 21:01	5.00
Copper	119		22.9	mg/kg dry		MJW	09/09/11 21:01	5.00
Lead	<91.3		91.3	mg/kg dry		MJW	09/09/11 21:01	5.00
Nickel	12.5		11.4	mg/kg dry		MJW	09/09/11 21:01	5.00
Potassium	<1140		1140	mg/kg dry		MJW	09/09/11 21:01	5.00
Zinc	213		57.3	mg/kg dry		MJW	09/09/11 21:01	5.00

### Method: [CALC] - General Chemistry Parameters

Analyte	Result	Qualifier	RL	Unit	D	Analyst	Analyzed	Dil Fac
Nitrogen Available	30200		392	mg/kg dry		AKM	09/14/11 13:45	10.0
Nitrogen Organic	34400			mg/kg dry		AKM	09/14/11 13:45	10.0
Nitrogen, Total	53400		3410	mg/kg dry		AKM	09/14/11 13:45	10.0

### Method: EPA 350.1/SM18 4500NH3 B,H - General Chemistry Parameters

Analyte	Result	Qualifier	RL	Unit	D	Analyst	Analyzed	Dil Fac
Ammonia as N	19000	M2	4180	mg/kg dry		KKH	09/12/11 16:38	10.0

### Method: EPA 351.2 - General Chemistry Parameters

Analyte	Result	Qualifier	RL	Unit	D	Analyst	Analyzed	Dil Fac
Nitrogen, Total Kjeldahl	53400		3410	mg/kg dry		AKM	09/14/11 13:45	10.0

### Method: EPA 353.2/SM18 4500NO3 F - General Chemistry Parameters

Analyte	Result	Qualifier	RL	Unit	D	Analyst	Analyzed	Dil Fac
Nitrate/Nitrite as N	<141	M2	141	mg/kg dry		KKH	09/08/11 13:07	1.00

### Method: EPA 365.2 - General Chemistry Parameters

Analyte	Result	Qualifier	RL	Unit	D	Analyst	Analyzed	Dil Fac
Phosphorus, Total as P2O5	33600		2810	mg/kg dry		AKM	09/14/11 15:49	20.0

### Method: SW 9045D - General Chemistry Parameters

Analyte	Result	Qualifier	RL	Unit	D	Analyst	Analyzed	Dil Fac
pH	7.01		0.10	S.U.		ARG	09/03/11 22:10	1.00

Client: Bob Evans Farms  
Project/Site: [none]

## Certification Summary

TestAmerica Job ID: DUI0086

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Dayton	Indiana	State Program	5	C-OH-10
TestAmerica Dayton	Kentucky	Kentucky UST	4	8
TestAmerica Dayton	Michigan	State Program	5	9931
TestAmerica Dayton	Ohio	OVAP	5	CL0018
TestAmerica Dayton	Ohio	State Program	5	OH-00010
TestAmerica Dayton	Ohio	State Program	5	OH-00010
TestAmerica Dayton	Ohio	State Program	5	OH-00010
TestAmerica Dayton	Ohio	State Program	5	OH-00010
TestAmerica Dayton	Ohio	State Program	5	OH-00010
TestAmerica Dayton	Pennsylvania	State Program	5	OH-00010
		NELAC	3	68-00577

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

## Definitions/Glossary

### Qualifiers

#### WC Inst

Qualifier	Qualifier Description
M2	The MS and/or MSD were below the acceptance limits due to sample matrix interference. See Blank Spike (LCS)

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
D	Listed under the "D" column to designate that the result is reported on a dry weight basis
RL	Reporting Limit
RPD	Relative Percent Difference: a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
%R	Percent Recovery
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit (Dioxin)
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or method detection limit if shown)
PQL	Practical Quantitation Limit



**TestAmerica Laboratory locations:  
Regulatory programs:**

701 6088

TestAmerica

[illegible]

# TestAmerica

## Cooler/Sample Receipt

☐ MSDS or Known Hazard Information Supplied by Client  
☐ Bottle stickers applied ☐ E1 MFMT comment entered ☐ MSDSA/OC scanned/entered to FHS  
☒ Discrepancies TEMP Client ID Bob Evans  
☐ Short Hold Work Order # DUE 0088  
☐ Rush ☐ 24hr ☐ 2day ☐ 3day ☐ 5day ☐ Other  
 Receipt evaluation performed by - Initials CE Date 9/2/11 Time 1040

### Method of Shipment:

☒ Walk-In Client ☐ TestAmerica Field/Courier  
☐ Other Client/3<sup>rd</sup> Party Courier  
☐ Fed Ex Tracking #  
☐ UPS Tracking #  
☐ Other

### Shipping Container Type:

☒ Cooler ☐ Box  
☐ None ☐ Other  
 Packing Materials:  
☒ Plastic Bags ☐ Foam  
☒ Bubble Wrap ☐ Paper  
☐ Packing Peanuts ☐ None  
☐ Other

### Custody Seals Intact:

☒ Yes ☐ No  
☐ N/A (not used or required)  
 Cooling Materials:  
☒ Ice (solid) ☐ Ice (Melted)  
☐ Blue Ice ☐ None  
☐ Other

Are there any soil samples from areas requiring USDA quarantine? (AL AR AZ CA FL GA HI ID IL MS NC NM NY OK SC TN TX VA Puerto Rico Virgin Islands, any other Non-Domestic area) ☒ No ☐ Yes (If Yes, Project Manager must be notified)

### Receipt Temperatures

Thermometer ID	Observed (°C)	Corrected (°C)	Temp Blank	Temp Sample	Received on same day	sampled?	Acceptable?	Cooler ID	Note Affected Samples if temperature not acceptable
7	26.7	26.7	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

\* Receipt temperatures are considered acceptable if the samples are received on the same day they were collected & show signs that the cooling process has started. Temperature acceptance for most tests is 56.0°C, but not frozen. For additional information, please refer to SOP DT-SCA 004 Sample Receipt and Login, Attachment 2 - Holding Times, Preservation and Container Requirements

### Receipt Questions\*\*

	Y	N	n/a	"No" answers require additional comment
COC present & TA receipt signature, date, & time properly documented?	<input checked="" type="checkbox"/>			
Containers & labels in good condition? (unbroken, not leaking, appropriately filled, labels legible & attached)	<input checked="" type="checkbox"/>			
Appropriate containers used & adequate volume provided?	<input checked="" type="checkbox"/>			
Number of sample containers match COC?	<input checked="" type="checkbox"/>			
Samples received within hold time?	<input checked="" type="checkbox"/>			
Samples submitted for GRO and Volatiles analyses (8260, 824, 524) received without headspace?			<input checked="" type="checkbox"/>	
Was a Trip Blank received with VOA samples?			<input checked="" type="checkbox"/>	
Were the samples free of any questionable physical conformities? (For example, field duplicates or multiple bottles of the same sample do not significantly vary in appearance (color, proportion of solids, etc.))	<input checked="" type="checkbox"/>			
Were the COC, bottle labels, and all other items free of all other discrepancies or issues that would need to be addressed with the Project Manager and/or Client?	<input checked="" type="checkbox"/>			

\*\* May not be applicable if samples are not for compliance testing

### Client Contact Record

Contact via: ☐ Phone ☐ Email ☐ Other Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
☐ Discrepancy allowance agreement is on record in the client project file

Discussion/Resolution:

Any additional documentation and clarification from client must be noted in the narrative and/or scanned into the COC directory.

Reviewed by PM Signature

Date

Page 5 of 5

WI No 01-SCA-WI-001 9  
 effective 09/15/2011

### 3 SITE INFORMATION

#### 3.1 General

One of the most important steps in establishing a good environmentally sound land application program is the proper selection of the site to be used based on the details in the plan. Site selection procedures normally begin after the site has been selected and is available for a waste utilization program. Bob Evans Farms has been utilizing the same 100 acres on a 10 acre rotation owned by Phil Harman for the last eight years as its primary location for land application. Bob Evans Farms has contracted the land until April 2014 when the contract will be up for renewal.

#### 3.2 Preliminary Screening

The generator will conduct a thorough preliminary screening of all prospective land application sites prior to contacting Ohio EPA. Since site acquisition and local and state approvals can be time consuming, this screening process shall take place well in advance of the date of initial application. All aspects of site acquisition shall be reviewed on both a long and short-term basis. The initial site screening process may be divided into three phases.

1. Estimate land area required for land application. To obtain an initial estimate of the area required for land application, the total quantity of waste (dry tons per year) must be known or estimated. This number, when divided by an assumed application rate will provide an estimate of total acreage needed. This total acreage figure may be adjusted based on mode and method of waste management operations, such as type of delivery and application equipment, and site specific factors, such as slope fertility levels and required isolation distances.
2. Eliminate unsuitable areas due to physical, environmental, land use, social and aesthetic reasons.

The use of United States Geological Survey (USGS) maps, soil survey maps and other sources can help provide screening for unsuitable areas such as:

- a. Land adjacent or close to urban/suburban development
  - b. Areas bordered by waterways without adequate isolation distance
  - c. Wetlands and marshes
  - d. Areas with slopes greater than 12%
  - e. Undesirable geology-bedrock, water table
  - f. Flood prone areas
  - g. Road weight restrictions
3. Identify suitable areas. The final step in the preliminary screening process is to identify the suitable areas. A list of proposed sites will be developed if needed for further

investigation. The generator will contact the Ohio EPA District Office at this time for a site inspection of the proposed sites.

### **3.3 Site Inspection**

The site inspection is a detailed review of all sites proposed by the generator.

1. Parties involved in the site inspection, in addition to the OHIO EPA Southwest District Office representative may include:
  - a. Local health department representatives
  - b. County extension agents-agriculture
  - c. Soil and Water Conservation District representatives
  - d. Generator
  - e. Any contracting parties
  - f. Landowner or tenant
  - g. Other interested parties
2. Conditions which should be evaluated are:
  - a. Isolation distances from residences, roads and property lines
  - b. Proximity to waterways, ponds, lakes, water wells and flood prone areas
  - c. Topography-slope drainage available
  - d. Soil Characteristics
  - e. Exact location of fields, acreage available
  - f. Existing crops, proposed crops
  - g. Assessment of local surface and groundwater use
  - h. Proposed application rate and method of application

### **3.4 Purpose of Use**

The primary purpose of use of the waste land application sites shall be specifically stated in the Background Report on the Sludge Land Application Program. Limitations on application rates, timing, etc. will be stated in the plan based on the purpose of use of the land. Some land uses for approved sites may include: 1. Agricultural crop land. 2. Turf. Each of these uses will be reviewed on a case-by-case basis, depending on the location as well as the nature of the material being land applied. The primary intent of Bob Evans is to acquire land application sites that are used primarily for agriculture and to apply waste within generally accepted agronomic rates.

### 3.5 Site Characteristics

Specific information on each individual site will be given. This information will include:

1. Analytical data on the soils; soils will be analyzed and the actual data presented as tables within the Waste Land Application Plan. A soil sample map will be referenced and the analysis should include the following parameters.

pH	Cadmium
Lime test index	Copper
Exchange capacity	Lead
Available phosphorus	Nickel
Available potassium	Zinc

(Possibly mercury also, if permit requires it)

2. Soil characteristics will be given a written description and respective soil types will be referenced using county Soil Survey maps to be included in the Land Application Plan.
3. Topography/slope characteristics will be described using USGS Topographical maps to be included in the Land Application Plan.
4. Local Water use; specific source of water (if any) going onto, under or being used on these sites and purpose of use will be stated in the Background Report on the Sludge Land Application Program.

### 3.6 Isolation Distances

Published Ohio EPA minimum isolation distances will be observed, based on both subsurface injection and surface application of liquid waste on these sites. See table 3-1.

**Table 3-1**  
**OHIO EPA OBSERVED ISOLATION DISTANCES FOR SLUDGE LAND APPLICATION**

Isolation distances for land application of sludge designed to limit public access and minimize the chance for nuisance and pollution conditions to develop, feet			
	Type and rate of sludge application		
	Liquid Sludge (<15% Solids) not injected	Liquid Sludge (<15% Solids) injected	Dewatered Sludge (15% Solids or greater)
Max. Daily Application gallons/acre/day	10,000	25,000	---
Neighbor Occupied Building	300	200	100
Wells, **Public/Private	300	200	300
Waters of the State	33	33	33
Springs	300	200	300

\* Not to exceed the available water holding capacity of the soil. (see page 59, OEPA Land Application of Sludge Manual, June 25, 1996 ed).

\*\* Sludge application within a wellhead protection area should be considered with the wellhead protection program for that area.

The above isolation distances may vary according to specific sites characteristics and OEPA discretion on a case-by-case basis (i.e. local water use, vegetation or crops being grown, slope, etc.).

### 3.7 Topography

The topography of the site is an important consideration to an environmentally sound Land Application Plan Topography related items which will be evaluated for a proposed site include: 1. Open or closed drainage systems; 2. Slope; 3. Run-off control and 4. Flood plain area.

#### 1. Drainage Systems

The open drainage systems permits the movement of sediment, waste and soluble material from a given site to the water course. The closed system, in contrast, will "contain" the sediment, waste and soluble material, thus eliminating the contamination of surface waters, the closed system contributes little, if any, pollution to the environment

outside its perimeter. However, a closed system may represent a short circuit to ground water and will be investigated.

## 2. Slope

Regardless of slope, certain conservation practices will be used to minimize run-off from waste treated soils. These practices will include reduced tillage systems, terraces, strip cropping and retention of crop residues on the surface wherever possible. In general, the following guidelines will be used:

### Slope

Greater than 12%

Will not be used for land application

6 to 12%

1. Only when at least 80% of the soil is covered with vegetation

2. Immediate incorporation is used

Less than 6%

Most desirable for land application

## 3. Runoff Control

Runoff is best controlled by applying waste to relatively flat surfaces (less than 6% slopes), on ground with heavy vegetation or by incorporating or injecting the waste into the soil. Runoff control consists of containment and/or treatment of liquid from the site to prevent degradation of nearby surface streams. Runoff from adjacent properties shall be diverted around the application area. Sludge will not be applied to flood prone areas or areas that will have a tendency to cause a ponding. Low rates of application will also eliminate the possibility of runoff or ponding of the liquids.

## 4. Flood Prone Areas

Areas that flood are considered to have severe limitations for land application of wastes. Waste will not be applied to areas that are within flood plain.

## 3.8 Geology and Groundwater Protection



The three major geological considerations when evaluating a potential site for land application are: 1. Groundwater, 2. Bedrock and 3. Soils.

#### 1. Groundwater

Groundwater data is essential to the evaluation process. Factors such as depth to groundwater (including seasonal highs and lows), groundwater quality and use and location of recharge zones are items which will be considered for determining the suitability of a potential site. High rates of waste application (greater than 5 dry ton/acre/year) will be avoided on land with pronounced lateral seepage due to bedrock or perched water table within three feet of the surface.

Waste will not be applied when groundwater is within ten feet of the surface when the soil percolation rate is greater than 2 inches/hour or five feet when the soil percolation rate is less than 2 inches/hour. These percolation rates will be determined based on the soil types existing on the sites; the source this soil types data will be reviewed in the Soil Survey for the county which the site is in. Areas that are highly susceptible to such high water table (seasonal or otherwise) shall be avoided.

#### 2. Bedrock

Bedrock characteristics can influence the direction and speed of groundwater movement and determine whether a pollutant might be carried large distances with only minimal biological or chemical renovation. Waste will not be applied in areas where the depth to bedrock is less than three (3) feet; the source this depth to bedrock data will be reviewed in the Soil Survey for the county which the site is in.

#### 3. Soils

The feasibility of waste utilization is influenced by the nature of the soils on which waste is applied. When soil properties are known and properly considered, waste can be applied to the land beneficially. Soils with a wide range of physical, chemical and biological characteristics can be used successfully if the system is designed to compensate for less than ideal properties. The chemical and physical; properties of the soil will be evaluated during the site selection process.



- a. Chemical Properties. Soil analysis shall be performed on all prospective sites. The chemical testing parameters shall include: pH, cation exchange capacity (C.E.C.), phosphates, potassium, calcium, magnesium and the base saturations of the exchangeable cations. The soil-waste mixture shall be maintained at a pH of 6.5 or greater. The C.E.C. is measured to determine the capacity of the soil to determine safe heavy metals application rates.
- b. Physical Properties. Texture is probably the most important physical property of soils. In general, the limitations on waste application by texture include:
  1. Sands, loamy sands. Leaching of nitrates and other soluble waste components is the major hazard. This should not be a problem if waste application rates provide available nitrogen which does not exceed the nitrogen requirement of the crop. Sands also have low C.E.C. and low buffering capacity (buffering capacity = soils ability to resist changes in pH).
  2. Loams, sandy loams. These soils have very few limitations to waste application.
  3. Silt loams. Major limitations include soil crusting, erodibility and potential for compaction.
  4. Clays, silty clays, clay loams, silty clay loams. Major limitations are poor drainage, poor aeration, slow permeability and serious potential problems with compaction. These limitations are less restrictive at waste application rates less than five (5) dry tons per year when soils are not excessively wet.

Soil permeability influences the length of time wastes remain in the soil and potential loading rates. Soils with a very high or a very low permeability should be avoided. Highly permeable soils are susceptible to leaching and waste may contaminate the groundwater. Low permeable soils can cause problems with ponding, erosion and run-off. In addition, waste-treated soils could temporarily become anaerobic (lacking oxygen), resulting in increased odors.

The source for this physical soil characteristics data to be reviewed is the Soil Survey for the county which the site is in. When site specific conditions are in conflict with the approved Plan, the site will be avoided unless a variance was requested of and could be obtained from Ohio EPA, which would be reviewed by the Agency on a case-by-case basis.

Bob Evans Foods has designated the Phil Harman Farm located in Green County Ohio at 2410 State Route 42 in Xenia, Ohio. This site consists of 100 available acres in which 10 acres are

reserved every year for land application. The following year a new 10 acre plot within the 100 acres is reserved. The fields are planted with a corn and soy bean rotation while leaving the 10 acre field uncultivated until the next planting rotation.

## **4 METHOD OF OPERATION**

### **4.1 General**

Waste will be handled primarily as a liquid, will be generally subsurface injected or surface applied or surface applied with immediate incorporation. Specific details of land application will be given in this Waste Management Plan and the Land Application Background Report.

### **4.2 Transportation**

Waste in transit from the Bob Evans Waste Treatment Facility to the application site is routed via a hard or paved driveway to a hard or paved public road to off-road lanes that access the application site fields. The earthen or gravel off-road lanes will not be traveled when conditions are not proper for transport of waste nor will waste be applied to the fields during such conditions.

### **4.3 Method of Application**

When conditions permit land application waste will be injected via a fixed head irrigation unit. The waste would be pumped directly from the transport truck to the field. The pumped waste material would then be spread by means of a traveling fixed head irrigation unit that will directly inject into the sub soil. In the event of a fixed head failure, the other fixed heads would still be able to operate independently of the in-operable head.

The necessary backup equipment will be available in the event of a breakdown. Table 4-1 shows the modes of transportation that are planned to be used and the methods of application that are planned to be used with such modes and the equipment that will be utilized in such cases.

**Table 4-1**  
**TRANSPORT MODES AND HANDLING CHARACTERISTICS FOR SLUDGE**

Sludge Phase	Transporter	Characteristics
Liquid (less than 15% solids)  Handling: potential to be pumped or flow by gravity	Pipeline	Need minimum velocity of 1 fps (0.3 mps) to keep solids in Suspension: friction decreases as pipe diameter increases (to the Fifth power); buried pipeline suitable for year-round use
	Tank truck	Capacity up to a maximum load allowed on road. Can have Gravity or pressurized discharge. Filled trafficability can be improved by using flotation tires.
	Farm wagon and tractor	Capacity 800 to 3,000 gallons (3-11m <sup>3</sup> ). Principal use would be for field application.
Dewatered sludges at greater than 15% solids	Rail hopper car	Need special unloading site and equipment for field application. Use water-tight box for wet solids.
Handling, conveyor or auger, (drier solids with bucket or auger)	Truck	Commercial equipment available to unload and spread on ground; need to level sludge piles if a dump truck is used. Use Water-tight box for wet solids.

#### 4.4 Crop Selection

Corn, soybeans, turf grass and wheat will be the primary crops to be grown on the land application acreage.

#### 4.5 Timing of Operations

All sludge land application activities shall be carried out in such a way as to reduce damage to crops being grown, reduce damage to roadways and lanes, alleviate compaction in the field and avoid application rates that are too high for crop needs. The ultimate decision as to whether or not sludge will be hauled on a given day shall be determined on that day with coordination between Bob Evans personnel, the hauler and the landlord (if landlord is different from either Bob Evans or the hauler). Field observation shall be made by either the hauler or the landlord and all parties shall be apprised of the field status and the decision shall be jointly made as to

whether or not to apply sludge on that day. Ultimately, the landlord or an official agent of that landlord shall have the final say on land application.

#### **4.6 Night Time Operations**

There will be no waste land application activities carried out after dark.

#### **4.7 Spill Contingency Plan**

In the unlikely event of a spill, Bob Evans shall have a proper agreement worked out with the contracted hauler to clean up in such events. The contracted hauler shall be required to be equipped with the resources and/or maintenance equipment necessary to remove, bury or mix the waste with soil or some other suitable material.

Prior to any clean up operations proper emergency procedures will be followed. If the spill occurs on a state, county or municipal street, the proper makers (reflectors, flares, and health departments will be notified; rescue/emergency medical service will also be notified, if necessary. The responsible parties with Bob Evans will be notified as well. The telephone numbers of these people and agencies will be posted around the Bob Evans Xenia Plant, in appropriate areas and conspicuously placed; they shall be properly removed will either be returned to the Bob Evans facility or spread on an Ohio EPA approved waste land application site. The covering materials (sand and other absorbent substances) and equipment that will be used in these spill events shall be readily available within the resources of the contracted hauler. The equipment that shall be available to deal with such spills include: dump trucks, bulldozers, front-end loaders, tank trucks and backhoes.

#### **4.8 Disposal Methods**

Under proper field and weather conditions, land application of the waste will be the means of disposal by direct injection into the sub soil. The land application will NOT take place if the ground is frozen; as an alternative means of disposal the sludge will be transported to the Xenia Sewer Facility located in Green County, Ohio.

#### **4.9 Odor Control**

Proper handling and storage at the processing facility have shown to reduce the odor of this waste material. In addition, land application will be direct injection into the sub soil that will reduce any odors substantially.

## 4.10 Application Rates

### 1. Nutrients

As shown in Table 4-1, there are a significant amount of nutrients that can benefit the typical crops that are grown in Ohio. Amounts of nitrogen, phosphorus and potassium that can be added to the soil would potentially reduce the amount of commercial fertilizer the grower would potentially reduce the amount of commercial fertilizer the grower would have to add for crop production.

One method of determining waste land application rates is the nutrient method. These application rates are determined by supplying the amounts of plant nutrients needed by the crop to be grown on this acreage. The major crop consideration and environmental concern is with nitrogen application rates. Available nitrogen is that nitrogen in the waste that is available as a nutrient to plants. The Ohio EPA Land Application Waste Manual, 1986 edition, defines available nitrogen as the total of the ammonia, nitrate and 30% of the organic nitrogen content of the waste. In determining the amount of plant available nitrogen that is being applied, the amount organic nitrogen must first be calculated. The calculation, based on actual waste analytical data in Insert 2-3 is:

$$\text{TKM} - (\text{ammonia} + \text{nitrate nitrogen}) = \text{organic nitrogen}$$

... the amount of plant available nitrogen would then be calculated as follows:

$$\text{Available N} = \text{NH}_4 + \text{NO}_3 + (\text{organic N} \times .30)$$

This calculation assumes 30% of the applied organic nitrogen will become available to plants the first year. Of what remains of the nitrogen applied in that year, 3% becomes available or mineralized each year thereafter. For example, if 150 lbs/ton of organic nitrogen were applied the first year, for two years the calculation would thus be:

$$\text{Year 1:} \quad 150 \text{ lbs/ton} \times .30 = 45 \text{ lbs/ton avail. N}$$

$$\text{Year 2:} \quad (150 - 45) \times .03 = 3.15 \text{ lbs/ton mineralized}$$

This amount (3.15 lbs/dry ton) should be added to any additional applications of available nitrogen (same calculation as in year 1), made in year 2. (taken from the OEPA Waste Land

Application Manual, 1986 edition, page 41). Potassium concentrations in wastes are usually much lower than nitrogen and phosphorus concentrations. Therefore, supplemental potassium is typically required to insure maximum crop production. For most crops, phosphorus content in waste is nearly the same. Therefore, application rates set for nitrogen utilization result in significant amounts phosphorus being added to the soil and no commercial supplementation of phosphorus needed.

**Table 4-2**  
**PLANT NUTRIENT AND HEAVY METALS CONTRIBUTION TO THE SOIL**  
**BY PROCESS WASTE SLUDGE**

Parameter (per acre)	Dry Tons/acre:				
	1.5	2.5	3.5	4.5	5.0
Gallons	7,494	12,490	17,486	22,482	24,980
Lbs	3,000	5,000	7,000	9,000	10,000
Solids					
% Solids (avg)	4.8	4.8	4.8	4.8	4.8
Nutrients					
Avail. Nitrogen <sup>^</sup>	69.5	115.8	162.1	208.4	231.5
Phosphate (P <sub>2</sub> O <sub>5</sub> )	95.6	159.4	223.1	286.9	318.8
Potassium (K <sub>2</sub> O)	6.4	10.6	14.9	19.1	21.3
Heavy Metals					
Cadmium	0.038	0.063	0.088	0.113	0.125
Copper	0.216	0.360	0.504	0.648	0.720
Lead	0.000	0.000	0.000	0.000	0.000
Nickel	0.000	0.000	0.000	0.000	0.000
Zinc	0.407	0.678	0.949	1.220	1.355

~ Based on sludge analysis as shown in Insert 2-3

<sup>^</sup> Based on calculation in Ohio EPA Land Application of Sludge Manual; page 37

## 2. Heavy Metals

Another method of determining waste application rates is by heavy metals. Essentially, the waste in question is a by-product of food processing: all food-grade materials are low in heavy metals, therefore the amounts of heavy metals added to the soil will be insignificant (see Table 4-2).



#### **4.11 Agricultural Management Plan**

At least a portion of the total tillable acreage is left fallow during the growing season for the purpose of applying waste. Additional acreage may become open for the purpose of waste application after wheat harvest; some rotation into sod production could also be a part of the prospective available acreage. Fields that are planted will be basically in a corn, soybeans, wheat and/or non-legume forage rotation.

Waste hauling and waste application are a contracted service bid on a time service contract. Specific details of the Agricultural Management Plan will be given in the Background Report on the Sludge Land Application Program for Bob Evans. These details will also entail making recommendations to Bob Evans, the hauler and the farmer as they pertain to waste land application. The Agricultural Management Plan will be formulated upon the approval by Ohio EPA of sites to be used for land application. Implementation of the Agricultural Management Plan shall be implemented upon commencement of land application activities.

According to the waste analysis dated 12/13/95 in Insert 2-2 and the total estimated volume of waste (as stated in Article 2.2 of this Plan) at approximately 25,000 gallons per month or 300,000 gallons per year, which, at 4.8% solids equals 60 dry tons yearly. Calculations were made of contributions of waste to the soil (Table 4-3). With these calculations considered, the accepted agronomic rate per acre of waste will be 3.5 dry tons (unless given permission by Ohio EPA to apply more based on loading rates for nitrogen. Considering crop needs (above calculation, based on 150 bu/acre corns), Bob Evans will need approximately 17 acres of OEPA approved crop land for waste application. Variation in the waste material's chemical make-up may create the need to make adjustments from the above application rate range.

Farming and agricultural crop production are in the long range plan for the prospective land application acreage; more specifically, crop rotations of corn, soybeans, wheat, non-legume hay and perhaps turf grass sod will be the main agricultural purpose. The agronomic crops that are grown on this acreage will be sold on the open commodities market; the hay will be for livestock consumption and the sod will be marketed on a wholesale basis to the landscape horticultural industry.

## **5 MONITORING INFORMATION**

## **5.1 Waste Monitoring**

Following plan approval, routing waste analysis of solids, metals and pH shall be submitted quarterly. Additional parameters may be required as necessary on a case-by-case basis. It is preferred to determine concentrations on a batch-by-batch basis. To obtain a representative sample, sub samples will be collected from several batches of production waste or the waste storage area. These sludge samples shall be analyzed for the following parameters:

- Ammonia Nitrogen
- Nitrate Nitrogen
- Kjeldahl Nitrogen
- Total Phosphorus
- Available Phosphorus ( $P_2O_5$ )
- Cadmium
- Chromium
- Copper
- Lead
- Nickel
- Zinc

Samples will be preserved after collection to prevent changes in composition by low temperature storage of 30 degrees F (4 degrees C), but not freezing. All nitrogen analyses will be performed at ambient moisture to minimize nitrogen losses prior to analysis. As a rule, nitrogen analysis shall be done immediately after sample collection.

## **6 CONTRACTS AND RESPONSIBILITY**

### **6.1 Contracts and Responsibility**

Written contract between the landowner and Bob Evans will be obtained when considered necessary. Bob Evans will exercise good business management practices with regard to these agreements. Typical contracts as they pertain to land hauling/application and landowner acceptance of waste are shown in Appendix 7-D. Such a contract is especially critical when waste is obtained from more than one source. The principal advantage of a written contract is to insure that both parties understand the agreement prior to applying the waste. A brief summary of desirable provisions, which should be included in the contract between the landowner and the Sewer District is listed below.

1. Identification of the parties involved and location of the land
2. Boundaries of site, entrance and exit points

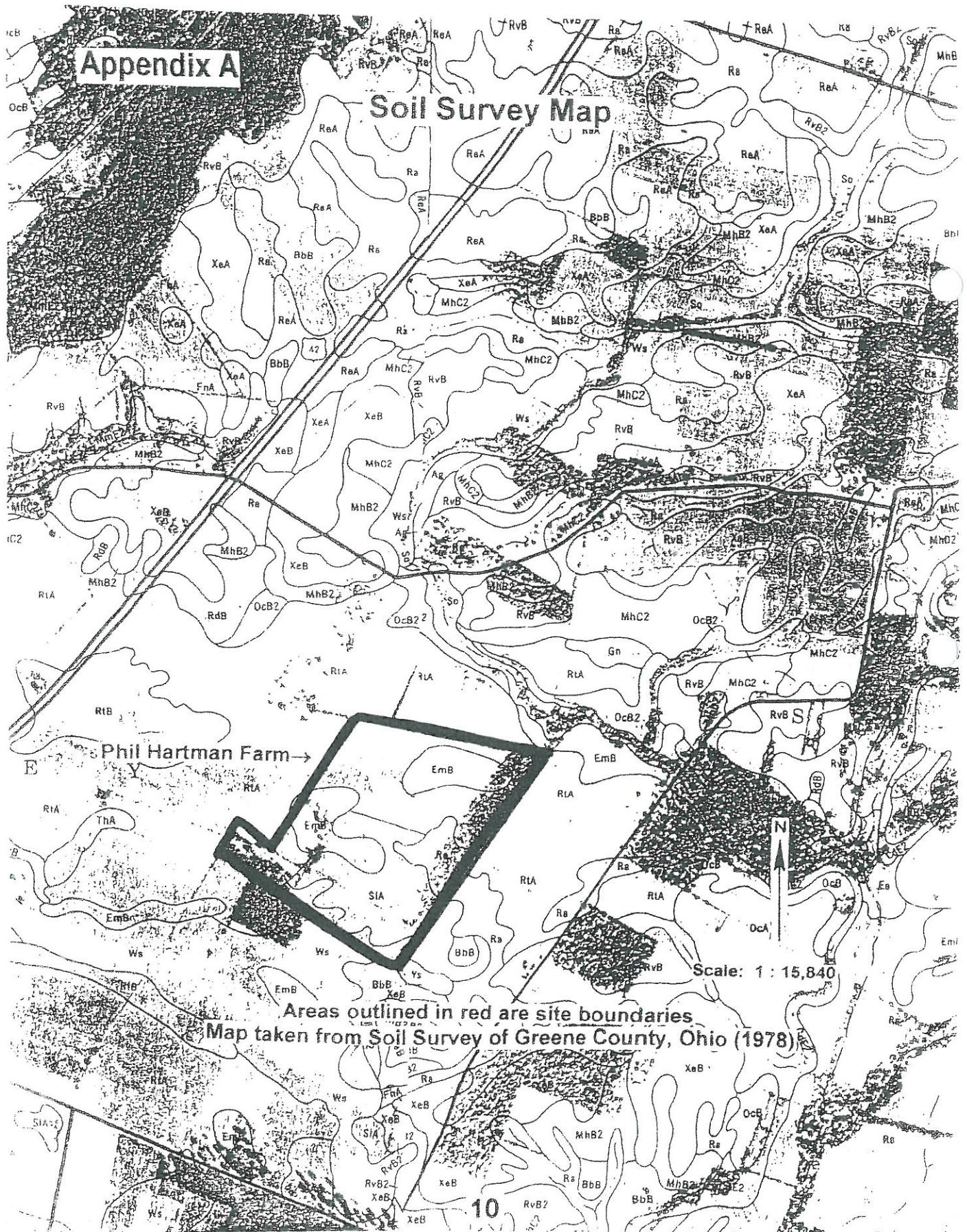


3. Specifics of waste quality to be applied, provisions for providing the farmer with waste and soil analysis, and who is to pay for the analysis
4. Any special provisions to provide for:
  - a. Inclement weather
  - b. Application during growing season
  - c. Storage
  - d. Frozen ground
  - e. Compaction in traffic areas
  - f. Rates
  - g. Future crop restrictions.
  - h. Need for nutrients in isolation distance areas
5. Escape Clause: It is important for landowners to understand that an approved plan for waste application does not remove their responsibility for water pollution or health hazards that may result from the application of waste to their land. The landowner, therefore, must exercise sufficient control over the operation to insure that runoff, nuisance or health problems do not occur. Should such problems arise, the landowner will usually be allowed a period of time to rectify the problem. The landowner should reserve the option to discontinue waste application in the event of such unforeseen problems.

A written contract between the waste hauler and Bob Evans will also be obtained when considered necessary. The (contracted) hauler shall abide by the Waste Management Plan and shall abide by all applicable provisions in the agreement between the landowner and Bob Evans (see Appendix 7-D).

Appendix A

Soil Survey Map



Areas outlined in red are site boundaries  
Map taken from Soil Survey of Greene County, Ohio (1978)

## APPENDIX 7-A

### Site Inspection Request Form (Data Sheet)



APPENDIX 7-A

Date \_\_\_\_\_  
County \_\_\_\_\_  
Township \_\_\_\_\_

SITE INSPECTION REQUEST FORM FOR  
AGRICULTURAL LAND FOR SLUDGE LAND APPLICATION

Name and address of owner of the farm(s) \_\_\_\_\_

\_\_\_\_\_  
Name and address of the operator of the farm(s) \_\_\_\_\_

\_\_\_\_\_  
Show location on an 8 1/2 x 11 section of USGS map or S. C. S. map (attached)

Attach plan of sludge application site showing:

- a. outline of farm property lines
- b. location of residences on the farm within 1,000 feet of the application area
- c. location of all wells on the Site within 100 feet of the Site
- d. number of acres in each field used
- e. give maximum slope on each field
- f. location of surface drainage swales, grass waterways, ditches, streams, flood plains, and isolation distances provided
- g. note soil pH (range), CEC (range), soil types on each field, depth to groundwater, plus type and depth of bedrock
- h. show actual area to be spread on each field.

Origin of sludge \_\_\_\_\_

Type of sludge to be applied: percent solids \_\_\_\_\_

form (liquid, vac. Filter, etc.) \_\_\_\_\_

Method of application \_\_\_\_\_

Quantity of sludge to be applied \_\_\_\_\_

Type of crop on field at time of application \_\_\_\_\_

Type of crop to be planted after application \_\_\_\_\_

Anticipated date(s) of application \_\_\_\_\_

Planned treatment of soil immediately after application \_\_\_\_\_

Has sludge been applied to land in previous years? \_\_\_\_\_ estimated dry tons/acre \_\_\_\_\_

## APPENDIX 7-B

### Site Status Report Form

# APPENDIX 7-B

## SITE STATUS REPORT

### A. Information

This report is to be used to report cumulative annual sludge applications on a specific field. Report latest annual work within 90 days of last application. Report all previous application since latest reported soil analysis.

Last soil analysis (date \_\_\_\_\_).

Operator \_\_\_\_\_ Applicator \_\_\_\_\_

Field I. D. \_\_\_\_\_ Date Submitted \_\_\_\_\_

County \_\_\_\_\_ Sludge source \_\_\_\_\_

Subsequent Applications mo./day/yr.	Sludge applied (dry tons)	Metals applied (lbs./acre)
---	------------------------------	-------------------------------

Start	Finish	Weight	Acres	Dry tons/acre	cadmium	copper	lead	nickel	zinc
-------	--------	--------	-------	---------------	---------	--------	------	--------	------

Total in Soil:

- Attach soil and, if necessary, tissue analysis.
- Attach log of any complaints received.
- was sludge incorporated as of the date of this report? \_\_\_\_\_
- Status of field:
  - limiting factor \_\_\_\_\_
  - yearly limit of cadmium (lbs./acre) \_\_\_\_\_

## APPENDIX 7-C

Land Application Documentation System

7-C-1 Sludge Hauler's Application Record

7-C-2 Load Slip

Appendix 7-C-1

BOB EVANS FARMS

SLUDGE HAULERS APPLICATION RECORD

Date: \_\_\_\_\_ Time: \_\_\_\_\_

Weather information:

Temperature: \_\_\_\_\_ Sky conditions: \_\_\_\_\_

Date of last rain or snow: \_\_\_\_\_ Amount/Date \_\_\_\_\_

Field No.	Applied to	Number of Gallons	Approx. Area Covered	Time
		(mark on map)		
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

Additional comments:

\_\_\_\_\_

\_\_\_\_\_

Name of operator/applicator: \_\_\_\_\_

Signature of operator/applicator: \_\_\_\_\_

Signature of Production Manager: \_\_\_\_\_

These reports to be attached to or kept with periodic waste analysis reports.



Appendix 7-C-2

BOB EVANS FARMS

LOAD SLIP

(To be filled out for payment to hauler)

Date(s) \_\_\_\_\_  
Name of Hauler \_\_\_\_\_  
Number of Loads Hauled   Gallons Hauled   Approx. No. of Hours to Haul \_\_\_\_\_  
\_\_\_\_\_

VERIFICATION:

Signature of Hauler \_\_\_\_\_  
Signature of Production Manager or Supervisor \_\_\_\_\_  
\_\_\_\_\_

## APPENDIX 8

### HARTMAN FARM LEASE

On this day 5-1- 2012 the parties of Ron Hartman (LANDLORD) and Bob Evans Inc (TENANT) have come to terms on the rent of 10 Acres of farm ground located in Greene County, at 2410 State Route 42 in Xenia, OH.

Agreement is for the application of wastewater on the designated acres. It is agreed that the contract will run for a period of two years (2) from May 1, 2012 to April 30, 2014.

The rent is the sum of Four thousand dollars (\$4000.00) and is to be paid by May 1<sup>st</sup> of each year.

Ron Hartman  
RON HARTMAN (Landlord)

B. J. Ellis  
BOB EVANS, INC (Tenant)  
By: 5-09-12

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX  
X INDUSTRIAL WASTE DISPOSAL X  
X APPROVED X  
X OHIO ENVIRONMENTAL PROTECTION AGENCY X  
X AS EVIDENCED BY COPY OF X  
X LETTER OF APPROVAL X  
X HERETO ATTACHED X  
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

**BOB EVANS INC  
SLUDGE LAND APPLICATION CONTRACT**

LYTLE TRUCKING LTD (Hauler) of 2274 E. Lytle Five Points Rd, Dayton, OH 45458 enters an agreement with BOB EVANS INC, to pump, haul and land apply the industrial sludge generated by the Bob Evans plant in Xenia, Ohio at a rate of \$.06/gallon.

The Hauler will abide by the approved plan for waste application and apply to only previously approved land sites. Hauler may recommend possible additional land application sites, but Bob Evans must make arrangements with an EPA approved consulting firm to get such sites approved for application at their own expense. Bob Evans will pay for the cost of the annual report prepared by such consulting firm and provide Lytle Trucking with copies of the same.

This agreement is for a term of two (2) years to expire May 1, 2014. The Hauler or Bob Evans has the option to terminate this agreement anytime by notifying the other party in writing sixty (60) days prior to the effective date.

DATE 5/18/12

B. P. R. H. S.  
BOB EVANS INC  
By:

Michael A. Clark  
MIKE FARM ENTERPRISES, INC.  
By: Michael A. Clark