



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

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Eric J. Holcomb
Governor

Brian C. Rockensuess
Commissioner

July 16, 2024

VIA E-MAIL: edaily17@gmail.com

Biocycle, LLC

Attn: Mr. Evan Daily

3788 East 300 South

Columbus, Indiana 47201

Re: Hybrid Biosolids and Industrial Waste Products
Land Application Permit No. IN LA 000915
Biocycle Facility 1, Bartholomew County

Dear Mr. Daily:

Biocycle, LLC's Land Application Permit for the Biocycle Facility 1 in Bartholomew County is approved. This permit allows you to accept biosolids and industrial waste products for blending and to land apply the blended waste product. The blended biosolids and/or industrial waste products will be stored in storage structures that meet the requirements in 327 IAC 6.1-8 and located in Bartholomew County until land application. You, the permittee, must follow Indiana's rules for land application (327 IAC 6.1) and the terms of this permit. Your attention to the requirements for managing biosolids and/or industrial waste products protects public health and the environment in your community.

This permit becomes effective upon issuance, unless stayed through an appeal action. The permit will expire on **June 30, 2029**. To operate past this date, you must submit a complete renewal application on or before **January 1, 2029**. Failure to do so will allow the permit to expire. Land applying biosolids and/or industrial waste products without a valid permit is prohibited.

IDEM may modify or revoke this permit for cause including, but not limited to: 1) violation of any terms or conditions of this permit; 2) obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; 3) a change in any condition which requires either a temporary or permanent reduction or termination of the authorized land application; or 4) a change in standards pursuant to Section 405(d) of the Clean Water Act, if the standards when promulgated contain different conditions, are otherwise more stringent, or control pollutants not addressed by this permit.

This permit may not be transferred to any person except after notice required by 327 IAC 6.1-3-5.



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We appreciate your input!



The permittee must allow an authorized representative of IDEM, upon the presentation of credentials, to enter the permittee's premises where an effluent source is located or in which any records are required to be kept under the terms and conditions of this permit, and at reasonable times, to have access to and copy any records required to be kept under the terms and conditions of this permit, to inspect any monitoring equipment or monitoring method required in this permit, and to sample any discharge of pollutants.

Public records for your facility are available in IDEM's Virtual File Cabinet at <http://vfc.idem.in.gov/>. Documents related to this approval can be found by selecting the "Solid Waste Program ID" in the "Quick Search" field (in the upper right-hand corner of the page) then enter your permit number, 000915. You may narrow your search to permit related documents by clicking on the down arrow next to "IDEM Document Type" and select "OLQ Permit".

You can review the Indiana Code (IC) and the Indiana Administrative Code (IAC) references in this document at iga.IN.gov. IC references are under the "Laws" link; IAC references are under the "Publications" link.

This permit does not: convey any property rights, either real or personal, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights or infringement of Federal, State, or local laws. It is the responsibility of the permittee to comply with any local laws regulating land application that contain requirements more stringent than those imposed by this permit.

If you wish to appeal this decision, you must file a Petition for Administrative Review. The enclosed Appeal Procedures document notifies you of additional important details regarding the appeal process and your rights and responsibilities for filing an adequate and timely appeal.

If you have any questions, please contact me at (317) 233-0472 or bstephan@idem.IN.gov.

Sincerely,



Brenda Stephanoff, Senior Environmental Manager
Solid Waste Permits Section
Office of Land Quality

Enclosure: Appeal Procedures

cc: Bartholomew, Decatur, Jackson, Jennings, Johnson, and Shelby County Health Departments
Bartholomew, Decatur, Jackson, Jennings, Johnson, and Shelby County Plan Commissions
Southeastern Indiana Solid Waste Management District
Decatur, Jackson, Johnson, and Shelby County Solid Waste Management Districts
Landowners

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PROHIBITIONS, LIMITS, AND RESTRICTIONS

You, the permittee, must comply with 327 IAC 6.1 and the following prohibitions, limits, and restrictions:

SECTION A. LAND APPLICATION PROGRAM RESTRICTIONS

A.1. PERMIT ACCESSIBILITY

Reference: 327 IAC 6.1-4-17(d)

You must retain a copy of this permit at the facility where the biosolids and/or industrial waste products are blended or at another approved location.

A.2. APPROVED MATERIAL

Reference: 327 IAC 6.1-2-7

Materials approved for land application under this permit are blends containing:

- two or more biosolids,
- two or more industrial waste products,
- one or more biosolids blended with one or more industrial waste products, or
- biosolids or industrial waste products blended with another material, such as manure, sawdust, or lime, substantially changing its physical or chemical characteristics.

Liquids captured in the collection tank may be blended with the biosolids and/or industrial waste products and land applied.

Industrial waste products must be approved prior to initial receipt by the Solid Waste Permits Section, see Sections H and I. All materials must be blended in storage structures that meet the criteria in 327 IAC 6.1-8 and located in Bartholomew County.

A.3. CERTIFIED OPERATOR

Reference: 327 IAC 6.1-4-3(a)

A certified wastewater treatment plant operator or approved equivalent must supervise all land application of biosolids and/or industrial waste products.

Within 30 days after a change in supervising operators, you must submit written notification to the Land Application Program of the name of the new operator and either their license number or a signed affidavit demonstrating at least one year of experience in land application management practices.

A.4. DISCHARGES FROM LAND APPLICATION OPERATIONS

Reference: 327 IAC 6.1-3-3

You are prohibited from allowing biosolids and/or industrial waste products to discharge into surface waters or ground water from a land application operation except under a valid National Pollutant Discharge Elimination System (NPDES) permit issued in accordance with 327 IAC 5.

A.5. NONSITE-SPECIFIC COUNTIES

Reference: 327 IAC 6.1-4-5.5

You may select and use nonsite-specific land application sites in Bartholomew, Decatur, Jackson, Jennings, Johnson, and Shelby counties only.

A.6. NONSITE-SPECIFIC SITES

Reference: 327 IAC 6.1-4-5(d)(3)

You may only select and use sites defined as agricultural land. Agricultural land is land used to produce a food crop, feed crop, or fiber crop; the production of trees for harvest; or pasture for animals to graze. Land application is prohibited on land used for other purposes.

A.7. SITE-SPECIFIC SITES

Reference: 327 IAC 6.1-4-5.5

The following sites located in Bartholomew County are approved for land application as site-specific application sites.

SITE ID	OWNER	ACRES	RANGE	TOWNSHIP	SECTION	CIVIL TOWNSHIP
BARNARD	JULIAN, KEVIN AND KELSEY	80.00	06E	09N	35 & 36	COLUMBUS & ROCK CREEK
DADS EAST	DAILY, JAMES	89.00	06E	09N	25	CLAY
DADS WEST	DAILY, JAMES	18.75	06E	09N	25	CLAY
DAFFRON	DAILY, JAMES	40.00	07E	09N	15	CLIFTY
FD	FRIEDERSDORF, DAVID	58.00	07E	08N	02	ROCK CREEK
FD 60	FRIEDERSDORF, DAVID	60.00	07E	08N	12	ROCK CREEK
GC NP	COLUMBUS REGIONAL HEALTH	198.00	05E	09N	26 & 35	COLUMBUS
GC NW	HANSTAD LLC	99.99	05E	09N	26	COLUMBUS
GC PASTURE	COLUMBUS REGIONAL HEALTH	124.00	05E	09N	34	COLUMBUS
GC SP	COLUMBUS REGIONAL HEALTH	152.00	05E	09N	35	COLUMBUS
GC SWP	COLUMBUS REGIONAL HEALTH	85.00	05E	09N	35	COLUMBUS
GC WEST	COLUMBUS REGIONAL HEALTH	58.00	05E	09N	34 & 35	COLUMBUS
GILBERTS	DAILY, EVAN & ERICA AND BENJAMIN & KRISTEN DAILY	61.12	06E	09N	33	COLUMBUS
HOME 1	DAILY, JAMES	87.56	07E	09N	11 & 12	CLIFTY

SITE ID	OWNER	ACRES	RANGE	TOWNSHIP	SECTION	CIVIL TOWNSHIP
HOME 2	DAILY, EVAN	73.42	07E	09N	11	CLIFTY
JOES	DAILY, JAMES	97.00	07E	09N	17 & 18	CLAY
SETTLES	DAILY, BENJAMIN	90.00	07E	09N	11	CLIFTY
STURGEON	STURGEON FAMILY TRUST	26.13	07E	09N	11	CLIFTY
WILHELM	DAILY, EVAN & ERICA AND BENJAMIN & KRISTEN DAILY	192.00	07E	08N	01	ROCK CREEK

SECTION B. LAND APPLICATION SITE RESTRICTIONS

B.1. SETBACKS

Reference: 327 IAC 6.1-4-5(d) and 6(a)

You must comply with the following setbacks when land applying biosolids and/or industrial waste products on nonsite-specific sites:

	SURFACE APPLICATION	SUBSURFACE INJECTION	INCORPORATION
SURFACE WATERS OR THE SURFACE CONDUIT TO A SUBSURFACE FEATURE	300 feet	33 feet	33 feet if incorporated by end of day, otherwise 300 feet
RESIDENCE (unless waived in writing)	660 feet*	660 feet*	660 feet*
ANY WELL	50 feet	50 feet	50 feet
POTABLE WELL	200 feet	200 feet	200 feet
PUBLIC BUILDING OR PUBLIC OR NONPUBLIC SCHOOL	660 feet	660 feet	660 feet

You must comply with the following setbacks when land applying biosolids and/or industrial waste products on site-specific sites:

	SURFACE APPLICATION	SUBSURFACE INJECTION	INCORPORATION
SURFACE WATERS OR THE SURFACE CONDUIT TO A SUBSURFACE FEATURE	300 feet	33 feet	33 feet if incorporated by end of day, otherwise 300 feet
RESIDENCE (unless waived in writing)	300 feet*	Up to property line	300 feet*
ANY WELL	50 feet	50 feet	50 feet
POTABLE WELL	200 feet	200 feet	200 feet
PUBLIC BUILDING OR PUBLIC OR NONPUBLIC SCHOOL	50 feet from property line	50 feet from property line	50 feet from property line

* The setback distance from a residence may be reduced if a waiver is obtained from the residence owner and, if applicable, tenant of the residence. Waivers must be obtained prior to land application and for each year in which biosolids and/or industrial waste products are proposed to be applied at distances less than the distance listed in the tables above from the residence.

B.2. SLOPE

Reference: 327 IAC 6.1-4-6(c)

You must comply with the following maximum slope restrictions when land applying biosolids and/or industrial waste products:

	SURFACE APPLICATION	INJECTION	INCORPORATION BY END OF DAY
LIQUID	6%	18%	6%
DEWATERED	12%	NA	18%

B.3. BEDROCK

Reference: 327 IAC 6.1-4-6(d)

You must not apply biosolids and/or industrial waste products to land that has less than 20 inches of soil overlying bedrock.

B.4. SOIL pH

Reference: 327 IAC 6.1-4-6(e), (f) and (g)

To determine the soil pH value, you must sample the soil to the depth of cultivation or depth of biosolids and/or industrial waste products placement, whichever is greater. You must collect one representative composite sample for every 25 acres, or fraction thereof, within the application site. You must have the samples analyzed by the electrometric method. Soil analyses must be no more than two years old at the time of land application.

The soil pH must be 5.5 standard units or greater at the time biosolids containing only biosolids are applied.

The soil pH must be 5.5 standard units or greater at the time blends that contain an industrial waste product with a cadmium concentration of 2 mg/kg (dry weight) or less are applied.

The soil pH must be 6.5 standard units or greater at the time blends that contain an industrial waste product with a cadmium concentration of greater than 2 mg/kg (dry weight) are applied.

B.5. CROP MANAGEMENT

Reference: 327 IAC 6.1-4-7(a) through (f)

Food crops, feed crops, and fiber crops, whose edible parts do not touch the surface of the soil, must not be harvested until 30 days after biosolids application. Such crops include corn, hay, small grains and soybeans.

Food crops with harvested parts that touch the biosolids/soil mixture and are completely above the ground must not be harvested until 14 months after application of biosolids. Such crops include melons, tomatoes, cabbage, lettuce, cucumbers and strawberries.

Food crops with harvested parts below the land surface where biosolids remain on the land surface for four months or longer prior to incorporation into the soil must not be harvested until 20 months after biosolids application. Such crops include potatoes, peanuts, onions, turnips and beets.

Food crops with harvested parts below the land surface where biosolids remain on the land surface for less than four months prior to incorporation must not be harvested until 38 months after biosolids application. Such crops include potatoes, peanuts, onions, turnips and beets.

Turf grown on land where biosolids are applied must not be harvested until one year after application of the biosolids if the harvested turf is placed on land with a high potential for public exposure.

B.6. PASTURE AND GRAZING

Reference: 327 IAC 6.1-4-7(e) and (n)

Grazing of animals on land where biosolids are applied must be restricted until 30 days after application of biosolids.

Biosolids and/or industrial waste products with a concentration of molybdenum greater than 40 milligrams per kilogram must not be applied to pasture.

B.7. APPLICATION SITE ACCESS

Reference: 327 IAC 6.1-4-7(g) and (h)

Access to land with a high potential for public exposure must be restricted for one year after biosolids application.

Access to land with a low potential for public exposure must be restricted for 30 days after biosolids application.

B.8. FLOOD PLAIN

Reference: 327 IAC 6.1-4-7(m)

You must inject, or incorporate into the soil by the end of the day of placement, any biosolids and/or industrial waste products applied in a flood plain.

B.9. FROZEN GROUND

Reference: 327 IAC 6.1-4-7(l)

You are approved to surface apply blends contain only biosolids and blends containing only industrial waste products to frozen or snow-covered ground as follows:

- Blends containing both biosolids and industrial waste products are prohibited from being land applied under this section of the permit.
- The land application program will be operated in such a manner that land application under this section of the permit is minimized.
- Prior to land application, you must visually mark the boundaries of all buffer zones with flags or similar devices to assure that only permitted areas are used for land application.
- Supervision at frozen ground land application sites will be increased. This will include additional field checks to ensure control measures when there are periods of significant rainfall events, extended periods of freezing and thawing, or when there are other environmental conditions that would result or are likely to result in runoff leaving the application site. Although not foreseen, any uncontrolled runoff from frozen ground application sites will result in corrective measures that could include earthen dikes, sand bagging, hay bale dams, portable pumping units, and extra personnel for on-call situations to respond to emergencies.
- You must track weather reports to include weekly forecast trends of precipitation and soil temperature monitoring, so that when unfavorable weather and soil conditions are anticipated, land application will be curtailed.
- All sources of biosolids that will be land applied on frozen or snow-covered ground must provide documentation showing the biosolids met vector attraction reduction prior to leaving the generating facility.
- You must not land apply within 50 feet of the boundary of a site unless a site borders another permitted site. This 50-foot boundary shall consist of sufficient contour tilling, heavily sodded grass, or heavy fodder to retard runoff and erosion from the site.
- You must not land apply within 660 feet of any neighboring residence unless the homeowner and/or tenant has signed a waiver to allow a reduced setback.
- You must not land apply within 300 feet from any well, surface waters, or the surface conduit to a subsurface feature.
- Land application is prohibited in a floodplain.
- Land application is prohibited when the moisture holding capacity of the soil is exceeded.

- Land application is prohibited on soil types with a slope greater than two percent.

B.10. ENDANGERED SPECIES

Reference: 327 IAC 6.1-4-7(j)

You must not apply biosolids and/or industrial waste products to the land if the biosolids and/or industrial waste products are likely to adversely affect a threatened or endangered species or its designated critical habitat or in violation of endangered species regulations at IC 14-22-34.

B.11. HISTORIC PRESERVATION

Reference: IC 14-21-1

You must not apply biosolids and/or industrial waste products to the land in violation of historic preservation requirements at IC 14-21-1.

B.12. MOISTURE HOLDING CAPACITY

Reference: 327 IAC 6.1-4-7(k)

You must not apply biosolids and/or industrial waste products to the land if the moisture holding capacity of the soil is exceeded.

B.13. PHRAGMITES CONTROL

Because the common reed, *Phragmites australis*, can be an invasive species, biosolids and industrial waste products from reed beds should be mulched to the point where the plant's propagules (including roots, stems and seeds) are no longer viable or the biosolids and industrial waste products should be applied in an area that is already infested with *Phragmites*.

SECTION C. STORAGE

C.1. STAGING

Reference: 327 IAC 6.1-4-8(f)

You may stage dewatered biosolids and/or industrial waste products on land application sites for up to 24 hours; however, you must conduct your land application operation to minimize staging. You must not stage more biosolids and/or industrial waste products on a site than can be applied to that site within 24 hours after placement. When staging biosolids and/or industrial waste products you must comply with the following setbacks:

	SETBACK
SURFACE WATERS OR THE SURFACE CONDUIT TO A SUBSURFACE FEATURE	300 feet
RESIDENCE (unless waived in writing)	660 feet
POTABLE WELL/DRINKING WATER SPRING	200 feet

You must not stage biosolids and/or industrial waste products on any area with a slope greater than two percent unless applied by the end of the same day.

You must not stage biosolids and/or industrial waste products in a flood plain unless applied by the end of the same day.

If biosolids and/or industrial waste products will remain staged for longer than 24 hours due to unforeseen circumstances, you must follow the requirements in the Stockpiling Section (C.2) of this permit.

C.2. STOCKPILING

Reference: 327 IAC 6.1-4-8(e)

You are approved to stockpile blends containing dewatered only biosolids and blends containing only industrial waste products at a land application site as follows:

- Blends containing both biosolids and industrial waste products are prohibited from being stockpiled at the land application site.
- You must operate the land application program in such a manner that stockpiling under this section of the permit is minimized.
- The amount of biosolids or industrial waste products stockpiled at a land application site must not exceed the amount of biosolids or industrial waste products that can be land applied to that field within a growing season.
- To help control odors the stockpile may be covered with lime as needed.
- To control vectors, prior to stockpiling you must obtain documentation from each source of biosolids documenting the biosolids meet one of the eight vector attraction reduction methods listed in 327 IAC 6.1-4-15.
- You must not stockpile at a land application site when the water table (seasonal or natural) is within three feet of the soil surface.
- You must not stockpile at a land application site for more than 90 days from the time at which the stockpile is initiated.
- You must construct a dirt or lime berm around the stockpile to control runoff. Any liquids generated within the berm must be collected and removed.
- You must not stockpile at a land application site within 300 feet of any body of fresh water or surface inlet to a subsurface drainage system.
- You must not stockpile at a land application site within 660 feet of any neighboring residence, unless a signed waiver has been received from the owner of the residence.
- Said waivers must be obtained from the residence owner for each year in which dewatered biosolids and/or industrial waste products are proposed to be stockpiled at distances less than 660 feet.

- You must not stockpile at a land application site within 660 feet of any potable wells or drinking water spring.
- You must not stockpile on any portion of the land application site with a slope in excess of two percent.
- You must not stockpile on any portion of the land application site that is in a flood plain.
- You must not initiate a stockpile on any portion of the land application site when the soil is saturated.
- Supervision at land application sites during periods when biosolids are stockpiled must be increased. This will include additional field checks to ensure control measures when there are periods of rainfall events, extended periods of freezing and thawing, or when there are other environmental conditions that would result or are likely to result in runoff leaving the application site. Although not foreseen, any uncontrolled runoff will result in corrective measures that could include earthen dikes, sand bagging, hay bale dams, portable pumping units, and extra personnel for on-call situations to respond to emergencies.
- You must track weather reports to include weekly forecast trends of precipitation, wind, and temperature so that when unfavorable weather and soil conditions are anticipated, stockpiling can be curtailed, or extra supervision will be provided.

C.3. STOCKPILING DOCUMENTATION

For each month in which biosolids and/or industrial waste products are stockpiled at the land application site, you must document the following information:

- The site identification for each site used for stockpiling.
- The date the stockpile was created.
- The method used to document vector attraction reduction.
- The date the biosolids and/or industrial waste products from the stockpile was land applied (or removed from the field).

C.4. STORAGE

Reference 327 IAC 6.1-4-8(a) through (d)

You must not store a fixed volume of biosolids and/or industrial waste products for land application in a storage structure for more than two years.

C.5. STORAGE STRUCTURES

Reference: 327 IAC 6.1-8

Structures used for the blending and storage of biosolids and/or industrial waste products must be constructed and maintained as required in 327 IAC 6.1-8 unless otherwise approved under a solid waste processing facility permit issued under 329 IAC 11 or a solid waste land disposal facility permit issued under 329 IAC 10.

Only storage structures located in Bartholomew County and meets the requirements in 327 IAC 6.1-8 may be used for blending and storage of biosolids and/or industrial waste products. Storage structures approved for use by other entities are not approved for the blending and storage of biosolids and/or industrial waste products in conjunction with this permit.

SECTION D. POLLUTANT CONCENTRATION LIMITS

D.1. HEAVY METALS

Reference: 327 IAC 6.1-4-9(c) and (g)

Pollutant concentrations in the biosolids and industrial waste products accepted by the permittee for blending must not exceed the following concentrations:

TABLE 1 – Ceiling Concentration Limits	
POLLUTANT	LIMIT mg/kg DRY WEIGHT BASIS
ARSENIC	75
CADMIUM	85
COPPER	4,300
LEAD	840
MERCURY	57
MOLYBDENUM	75
NICKEL	420
SELENIUM	100
ZINC	7,500

Pollutant concentrations in the blended biosolids and/or industrial waste products to be applied must not exceed the following concentrations:

TABLE 3 – Exceptional Quality Concentration Limits	
POLLUTANT	LIMIT mg/kg DRY WEIGHT BASIS
ARSENIC	41
CADMIUM	39
COPPER	1,500
LEAD	300
MERCURY	17
MOLYBDENUM	75
NICKEL	420
SELENIUM	100
ZINC	2,800

If any of the preceding limits for the blended biosolids and/or industrial waste products are found to be exceeded, you must resample the contents of the storage structure by collecting at least four representative samples and have each sample analyzed for the pollutant(s) that exceeded a limit.

- If the average of the analytical results for the four samples is less than the applicable limit in Table 3, the biosolids and/or industrial waste products may then be land applied.
- If the average of the analytical results for the four samples exceeds the applicable limit in Table 3:
 - you must notify the Solid Waste Permits Section,
 - you must have "tracer" samples analyzed for the exceeding metal (refer to section G.3.), and
 - you may land apply the blended biosolids and/or industrial waste product to a site-specific application site, provided the concentration does not exceed the Table 1 Concentration Limits, upon approval by the Solid Waste Permits Section.

D.2. PCBs

Reference: 327 IAC 6.1-4-12

You must not accept biosolids and/or industrial waste products for blending that contain concentrations of polychlorinated biphenyls (PCBs) of 2 mg/kg or greater on a dry weight basis.

SECTION E. APPLICATION AND LOADING RATES

E.1. CROP APPLICATION RATES

Reference: 327 IAC 6.1-4-10(a)(1) and (b)

You must apply biosolids and/or industrial waste products at rates that do not exceed the following Plant Available Nitrogen (PAN) loading rates, calculated using the formulas below:

CROP	POUNDS OF PAN PER ACRE*
CORN	200
SOYBEANS	100
HAY / PASTURE	100
CEREAL GRAIN	100
SET ASIDE / IDLE	50

* You must adjust the PAN application rate for the proposed crop to account for application of fertilizers, manure, and the presence of residual available nitrogen in the soil from previous applications of biosolids, industrial waste product, or pollutant-bearing water.

GENERAL FORMULAS

Gallons X 8.34 = Pounds

Pounds / 2000 = Wet Tons (as generated/truck tons)

Wet Tons X Percent Total Solids (decimal form) = Dry Tons

Wet Weight (mg/l or ppm) / Percent Total Solids (decimal form) = Dry Weight (mg/kg)

Dry Weight / 10,000 = Percent Dry Weight

Crop Need / PAN per Dry Ton = Dry Tons Per Acre

NITROGEN CALCULATION FORMULAS

GENERAL CALCULATIONS

- % Total Nitrogen = % Total Kjeldahl Nitrogen + % Nitrate Nitrogen
- % Organic Nitrogen = % Total Nitrogen - (% Ammonia Nitrogen + % Nitrate Nitrogen)

PAN CALCULATION FOR BIOSOLIDS

- Pounds Organic Nitrogen per dry ton = % Organic Nitrogen X 4
- Pounds of Ammonia Nitrogen per dry ton = % Ammonia Nitrogen X 20
- Pounds of Nitrate Nitrogen per dry ton = % Nitrate Nitrogen X 20
- Pounds PAN per dry ton = Pounds of Organic Nitrogen per dry ton + Pounds of Ammonia Nitrogen per dry ton + Pounds of Nitrate Nitrogen per dry ton

RESIDUAL NITROGEN CALCULATION FOR BIOSOLIDS

- Pounds of Residual Nitrogen available one year after application =
% Organic Nitrogen X 2 X dry tons applied per acre
- Pounds of Residual Nitrogen available two years after application =
% Organic Nitrogen X dry tons applied per acre
- Pounds of Residual Nitrogen available three years after application =
% Organic Nitrogen X 0.5 X dry tons applied per acre

PAN CALCULATION FOR BLENDS CONTAINING ONLY INDUSTRIAL WASTE PRODUCTS

- Pounds Organic Nitrogen per dry ton = % Organic Nitrogen X 6
- Pounds of Ammonia Nitrogen per dry ton = % Ammonia Nitrogen X 20
- Pounds of Nitrate Nitrogen per dry ton = % Nitrate Nitrogen X 20
- Pounds PAN per dry ton = Pounds of Organic Nitrogen per dry ton + Pounds of Ammonia Nitrogen per dry ton + Pounds of Nitrate Nitrogen per dry ton

RESIDUAL NITROGEN CALCULATION INDUSTRIAL WASTE PRODUCTS

- Pounds of Residual Nitrogen available one year after application =
% Organic Nitrogen X 3 X dry tons applied per acre
- Pounds of Residual Nitrogen available two years after application =
% Organic Nitrogen X 1.6 X dry tons applied per acre
- Pounds of Residual Nitrogen available three years after application =
% Organic Nitrogen X 0.8 X dry tons applied per acre

E.2. ANNUAL POLLUTANT LOADING RATES *Reference: 327 IAC 6.1-4-10(a)(2)*

You must apply biosolids and/or industrial waste products at rates that do not exceed the following Annual Pollutant Loading Rates, calculated using the formula below:

POLLUTANT	ANNUAL POLLUTANT LOADING RATE (pounds per acre per 365-day period)
ARSENIC	1.8
CADMIUM	0.45
COPPER	66.0
LEAD	13.4
MERCURY	0.7
MOLYBDENUM	Not applicable
NICKEL	18.7
SELENIUM	4.4
ZINC	124.9

Use the following formula to calculate the maximum amount of biosolids and/or industrial waste products to be applied per acre per 365-day period:

$$ALR = \frac{APLR}{C \times 0.002}$$

Where

ALR = Annual loading rate in dry tons per acre per 365-day period (dry tons of biosolids and/or industrial waste products per acre per year).

APLR = Annual pollutant loading rate in pounds per acre per 365-day period from table (pounds per acre per year).

C = Pollutant concentration in mg/kg (mg of pollutant per kg of biosolids and/or industrial waste products dry weight)

SECTION F. PATHOGEN AND VECTOR ATTRACTION REDUCTION RESTRICTIONS

F.1. PATHOGEN REDUCTION ALTERNATIVES *Reference: 327 IAC 6.1-4-13 and 14*

You must document the geometric mean of the density of fecal coliform in the biosolids does not exceed 2,000,000 most probable number (MPN) per gram of total solids or 2,000,000 colony-forming units (CFU) per gram of total solids under each instance identified below.

- from each source, prior to receiving dewatered biosolids for blending;
- prior to land application of biosolids blended with industrial waste products;
- prior to land application of biosolids blended with animal manure.

F.2. VECTOR ATTRACTION REDUCTION OPTIONS *Reference: 327 IAC 6.1-4-15*

You must document vector attraction reduction for blends containing biosolids by one of the following methods:

- When blends containing only biosolids will be surface applied, you must obtain documentation showing one of the following vector attraction reduction options has been met for each source of biosolids, prior to creating blends containing only biosolids. Surface application of blends containing biosolids and industrial waste products is prohibited.
 - The mass of volatile solids in the biosolids has been reduced by at least 38% as determined by EPA-625/R-92/013 *Environmental Regulations and Technology - Control of Pathogens and Vectors in Sewage Sludge*.
 - Digest a portion of the previously digested biosolids anaerobically in the laboratory in a bench-scale unit for 40 additional days at a

temperature between 30 and 37 °C. When, at the end of the 40 days, the volatile solids in the biosolids at the beginning of that period are reduced by less than 17%, vector attraction reduction is achieved.

- Digest a portion of the previously digested biosolids that has percent total solids of 2% or less aerobically in the laboratory in a bench-scale unit for 30 additional days at 20 °C. When, at the end of the 30 days, the volatile solids in the biosolids at the beginning of that period are reduced by less than 15%, vector attraction reduction is achieved.
 - As determined using Part 2710 B in *Standard Methods for the Examination of Water and Wastewater*, the specific oxygen uptake rate (SOUR) for biosolids treated in an aerobic process must be equal to or less than 1.5 milligrams of oxygen per hour per gram of total solids at a temperature of 20 °C.
- You must meet one of the following vector attraction reduction methods at the time of land application of blends containing biosolids (may also contain industrial waste products):
 - Inject biosolids below the surface of the land such that no significant amount of biosolids are present on the land surface within one hour after the biosolids are injected.
 - Incorporate biosolids applied to the land surface into the soil within six hours after application to or placement on the land.

SECTION G. MONITORING AND ANALYSIS

G.1. TOTAL SOLIDS

Reference: 327 IAC 6.1-4-16(d)

During each day of land application, you must monitor biosolids and/or industrial waste products that are to be applied to the land for percent total solids.

G.2. NUTRIENTS

Reference: 327 IAC 6.1-4-16(i) and (j)

Prior to land application, you must collect a representative sample from a set volume of blended biosolids and/or industrial waste products within the storage structure and have it analyzed for the parameters listed below. The results of the analysis must be reported on both a wet weight and dry weight basis and are valid for the volume represented. Re-sampling of the set volume of the storage structure is required upon introduction of additional biosolids or industrial waste products to the set volume, prior to land application of the new mixture.

CATEGORY	PARAMETERS	REFERENCE METHOD
	Percent Total Solids	Dry at 103 to 105 °C
NUTRIENTS	Total Nitrogen	EPA-600/4-79-020 (351) *
	Ammonia Nitrogen	EPA-600/4-79-020 (350)
	Nitrate Nitrogen	EPA-600/4-79-020 (300 or 352)
	Phosphorus	EPA-600/4-79-020 (365)
	Potassium	EPA-600/4-79-020 (200)

* Total Nitrogen is a calculated value obtained by adding Total Kjeldahl Nitrogen and Nitrate Nitrogen.

G.3. HEAVY METALS

Reference: 327 IAC 6.1-4-16(e) and (f)

You must obtain analytical information regarding the quality of all biosolids and industrial waste products received at this facility for parameters including Arsenic, Cadmium, Copper, Lead, Nickel, Mercury, Molybdenum, Selenium, Zinc and PCBs.

You must collect and preserve samples from each load of biosolids and industrial waste products received at this facility (referred to as "tracer" samples). These samples must be maintained until the volume of blended biosolids and/or industrial waste products they represent have been land applied.

Prior to land application, you must collect a representative sample from a set volume of blended biosolids and/or industrial waste products within the storage structure and have it analyzed for the parameters listed below. The results of the analysis must be reported on both a wet weight and dry weight basis and are valid for the volume represented. Re-sampling of the set volume of the storage structure is required upon introduction of additional biosolids or industrial waste products to the set volume, prior to land application of the new mixture.

CATEGORY	PARAMETERS	REFERENCE METHOD
	Percent Total Solids	Dry at 103 to 105 °C
TOTAL HEAVY METALS	Arsenic	EPA/600/4-91/010 (200) or SW 846
	Cadmium	EPA/600/4-91/010 (200) or SW 846
	Copper	EPA/600/4-91/010 (200) or SW 846
	Lead	EPA/600/4-91/010 (200) or SW 846
	Mercury	EPA/600/4-91/010 (245) or SW 846
	Molybdenum	EPA/600/4-91/010 (200) or SW 846
	Nickel	EPA/600/4-91/010 (200) or SW 846
	Selenium	EPA/600/4-91/010 (200) or SW 846
	Zinc	EPA/600/4-91/010 (200 or 289) or SW 846
	PBC's	

G.4. PATHOGEN AND VECTOR ATTRACTION REDUCTION

Reference: 327 IAC 6.1-4-16(e) and (f)

Under each of the following instances, seven representative samples must be collected, and each sample analyzed for fecal coliform using Standard Methods 18th Edition Part 9221 E or Part 9222 D. Each sample must be analyzed within 24 hours of sample collection.

- For blends containing dewatered biosolids only, you must require each source of biosolids to demonstrate compliance with pathogen reduction requirements at the following frequency:

DRY TONS OF BIOSOLID GENERATED BY THE FACILITY PER 365-DAY PERIOD	FREQUENCY OF MONITORING
Greater than 0 but less than 319	Annually
Greater than 319 but less than 1,653	Quarterly
Greater than 1,653 but less than 16,530	Bi-Monthly
Greater than 16,530	Monthly

- For blends containing both dewatered biosolids and industrial waste products, you must collect the required number of representative samples from a set volume within the storage structure and have them analyzed as indicated above prior to beginning application from the storage structure. The results of these analyses are valid for the volume represented. Re-sampling of the set volume of the storage structure is required upon introduction of additional biosolids or industrial waste products to the set volume within the storage structure, prior to land application of the new mixture.

When blends containing only biosolids will be surface applied or stockpiled at the land application site, you must obtain documentation from each source of biosolids demonstrating vector attraction reduction requirements at the following frequency:

DRY TONS OF BIOSOLID GENERATED BY THE FACILITY PER 365-DAY PERIOD	FREQUENCY OF MONITORING
Greater than 0 but less than 319	Annually
Greater than 319 but less than 1,653	Quarterly
Greater than 1,653 but less than 16,530	Bi-Monthly
Greater than 16,530	Monthly

Documentation required to be received with the biosolids include:

- The results of a Specific Oxygen Uptake Rate (SOUR) test for aerobically digested biosolids where the dissolved oxygen concentration is recorded every 30 seconds for 15 minutes. These analyses must be conducted

within two hours of sample collection using *Standard Methods for the Examination of Water and Wastewater*, 18th Edition, Part 2710 B. The total solids of the biosolids sampled must be less than two percent.

- Documentation showing the volatile solids in the biosolids are reduced by 38 percent. To document this method, a sample must be collected of the sewage sludge at the point at which sludge enters the treatment process, and a second sample of biosolids (treated sewage sludge) collected at the point at which treatment is considered complete. These samples must be collected no less than twice per month with at least 15 days between sampling events. Volatile solids shall be analyzed on these samples using Standard Method 2540 G. The volatile solids reduction must be calculated using the Van Kleeck formula identified below.
- For the additional anaerobic digestion method, a portion of previously digested biosolids must be batch-digested in the laboratory in a bench-scale unit at 30°C to 37°C for an additional 40 days. Prior to the batch-digestion, a sample of the biosolids to be batch-digested must be collected and analyzed for total solids and volatile solids. Additional samples must be collected on day 20 and 40 (end of the batch-digestion process) and analyzed for total solids and volatile solids. Each sample must be analyzed for volatile solids using Standard Method 2540 G. Volatile solids reduction is calculated using the Van Kleeck formula identified below.
- For the additional aerobic digestion method, a portion of previously digested biosolids must be batch-digested in the laboratory in a bench-scale unit at 20°C for an additional 30 days. Prior to the batch-digestion, a sample of the biosolids to be batch-digested must be collected and analyzed for total solids and volatile solids. Additional samples must be collected on day 15 and 30 (end of the batch-digestion process) and analyzed for total solids and volatile solids. Each sample must be analyzed for volatile solids using Standard Method 2540 G. Volatile solids reduction is calculated using the Van Kleeck formula identified below.
 - Van Kleeck formula:

$$\%VSR = \frac{(VS_{in} - VS_{out})}{(VS_{in} - (VS_{in} * VS_{out}))} * 100$$

For each month in which land application occurs, you must complete the pathogen and vector attraction reduction (preparer and applicator) certification statements indicating pathogen and vector attraction reduction is achieved (or not achieved) and the method(s) used to document pathogen and vector attraction reduction.

G.5. MAXIMUM DETECTION LIMITS

Reference: 327 IAC 6.1-4-9(e)

The following maximum detection limits apply when analyzing biosolids and/or industrial waste products that have total solids of one percent or greater:

POLLUTANT	MAXIMUM DETECTION LIMIT mg/kg DRY WEIGHT BASIS
ARSENIC	2
CADMIUM	10
COPPER	Not applicable
LEAD	10
MERCURY	2
MOLYBDENUM	10
NICKEL	10
SELENIUM	2
ZINC	Not applicable

SECTION H. INDUSTRIAL WASTE PRODUCT HAZARDOUS WASTE DETERMINATION

Reference: 327 IAC 6.1-1-3(c)

Prior to the receipt and blending of any industrial waste product, you must verify the industrial waste product has been determined to be non-hazardous in compliance with 329 IAC 3.1, with specific attention to 329 IAC 3.1-6, Identification and Listing of Hazardous Waste. You must retain on file documentation of this determination for a minimum of five years.

SECTION I. VOLATILE ORGANIC COMPOUND MONITORING

At least 30 days prior to the intended blending of any industrial waste products or biosolids originating from an industrial facility, you must provide the following information to the Solid Waste Permits Section:

- the name of the generating facility,
- the location of the generating facility,
- the name, address, and phone number of a contact person at the generating facility, and
- a description of the waste(s) generated by the facility that are to be received by the permittee for blending, including detailed information about the processes by which the waste(s) are generated and any volatile organic compounds utilized in the process by which the wastes are generated, or the results of an analysis for VOCs and SVOCs (including level three quality assurance/quality control documentation) (method SW-846-8260).

SECTION J. RECORD KEEPING AND REPORTING

J.1. RECORD KEEPING

Reference: 327 IAC 6.1-4-17

The person who applies the biosolids and/or industrial waste products must create the following records for each day on which land application occurs:

- the location, indicated on a site map, on each site where biosolids and/or industrial waste products were applied;
- the number of acres in each site to which biosolids and/or industrial waste products were applied;
- the date biosolids and/or industrial waste products were applied to each site;
- the amount of biosolids and/or industrial waste products in dry tons applied to each site;
- a description of how the site restrictions and the management practices were met for each site on which biosolids and/or industrial waste products are applied; and
- if vector attraction reduction requirements are met by injection or incorporation, a certification statement indicating the vector attraction reduction requirements were met and a description of how the vector attraction reduction requirements were met.

You must retain the following records for at least five years:

- the results of analyses required by this permit;
- a description of how the site restrictions and the management practices were met for each site on which biosolids and/or industrial waste products are applied;
- documentation of each source of biosolids and industrial waste products received for blending, including the name and address of the generating facility, the quantity received, and the quality;
- for blends containing biosolids, certification statements indicating the pathogen reduction requirements were met;
- for blends containing biosolids, a description of how the Class B pathogen reduction requirements were met;
- for blends containing biosolids, certification statements indicating the vector attraction reduction requirements were met;
- for blends containing biosolids, a description of how the vector attraction reduction requirements were met; and

- documentation for the length of time biosolids and/or industrial waste products were stockpiled at the land application site as identified in Section C.3.

You must create the following records and retain them indefinitely:

- The cumulative amount of each of the following pollutants in pounds per acre that have been applied to each application site by the permittee:

Arsenic	Lead	Selenium
Cadmium	Mercury	Zinc
Copper	Nickel	

- A description of how the cumulative amount of each pollutant listed above was determined.
- The location, indicated on a site map, on each site where biosolids and/or industrial waste products were applied; the number of acres on each site to which land application occurred; the date of land application to each site; and the amount, in dry tons, applied to each site, provided by the person who applied the biosolids and/or industrial waste products.

J.2. REPORTING

Reference: 327 IAC 6.1-4-18

You must submit monthly reports to the Solid Waste Permits Section within 30 days after the last day of each calendar month for the term of the permit. Submit all reports to LAREports@idem.IN.gov.

Each month you must submit documentation (including the name and the quantity) of each source of biosolids and industrial waste products received for blending that month or indicated no biosolids or industrial waste products were received.

For each month during which no land application occurs, you must submit one Land Application Monthly Report form or e-mail indicating no biosolids or industrial waste products disposal or summarizing any other disposal methods you used.

For each month during which biosolids and/or industrial waste products are stockpiled at a land application site, you must submit the documentation required in Section C.3.

For each month during which land application occurs, the monthly report must include:

- a Land Application Monthly Report form summarizing all biosolids and/or industrial waste product disposal that month,

- a Land Application Site Activity Report for each application site used,
- a Land Application Site-Use Map for each application site used,
- any set-back waivers obtained from neighboring residences,
- a copy of each soil analysis used to prepare the report
- soil pH adjustment documentation (at the time of adjustment),
- a copy of each analysis of the blended biosolids and/or industrial waste products used to prepare the report, and
- pathogen and vector attraction reduction documentation including certification statements.

For each application site not listed in this permit and used for the first time after the effective date of this permit, the monthly report must include:

- an Application Site Information Form,
- an Application Site Land-Use Agreement,
- a USDA NRCS Soil Survey map detailing the location and boundaries of the application site, and
- a soil analysis.

You must notify the Solid Waste Permits Section of the cumulative application on a land application site of any metal in a quantity equal to or greater than 90% of the following within 30 days after any of these levels are reached:

POLLUTANT	CUMULATIVE POLLUTANT LOADING RATE (pounds per acre)
ARSENIC	36
CADMIUM	34
COPPER	1338
LEAD	267
MERCURY	15
MOLYBDENUM	Not applicable
NICKEL	374
SELENIUM	89
ZINC	2499



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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Eric J. Holcomb
Governor

Brian C. Rockensuess
Commissioner

What if you are not satisfied with this decision and you want to file an appeal?

Who may file an appeal?

The decision described in the accompanying Notice of Decision may be administratively appealed. Filing an appeal is formally known as filing a “Petition for Administrative Review” to request an “administrative hearing”.

If you object to this decision issued by the Indiana Department of Environmental Management (IDEM) and are: 1) the person to whom the decision was directed, 2) a party specified by law as being eligible to appeal, or 3) aggrieved or adversely affected by the decision, you are entitled to file an appeal. (An aggrieved and adversely affected person is one who would be considered by the court to be negatively impacted by the decision. If you file an appeal because you feel that you are aggrieved, it will be up to you to demonstrate in your appeal how you are directly impacted in a negative way by the decision).

The Indiana Office of Administrative Law Proceedings (OALP) was established by state law – see Indiana Code (IC) 4-15-10.5 and is a separate state agency independent of IDEM. Review by OALP of IDEM decisions is limited to the review of environmental pollution concerns or any alleged technical or legal deficiencies associated with the IDEM decision making process. Once your request has been received by OALP, your appeal may be considered by an Administrative Law Judge.

What is required of persons filing an appeal?

Filing an appeal is a legal proceeding, so it is suggested that you consult with an attorney. Your request for an appeal must include your name and address and identify your interest in the decision (or, if you are representing someone else, his or her name and address and their interest in the decision). In addition, please include a photocopy of the accompanying Notice of Decision or list the permit number and name of the applicant, or responsible party, in your letter.

Before a hearing is granted, you must identify the reason for the appeal request and the issues proposed for consideration at the hearing. You also must identify the permit terms and conditions that, in your judgment, would appropriately satisfy the requirements of law with respect to the IDEM decision being appealed. That is, you must suggest an alternative to the language in the permit (or other order, or decision) being appealed, and your suggested changes must be consistent with all applicable laws (See Indiana Code 13-15-6-2) and rules (See Title 315 of the Indiana Administrative Code, or 315 IAC).



A State that Works

The effective date of this agency action is stated on the accompanying Notice of Decision (or other IDEM decision notice). If you file a “Petition for Administrative Review” (appeal), you may wish to specifically request that the action be “stayed” (temporarily halted) because most appeals do not allow for an automatic “stay”. If, after an evidentiary hearing, a “stay” is granted, the IDEM-approved action may be halted altogether, or only allowed to continue in part, until a final decision has been made regarding the appeal. However, if the action is not “stayed” the IDEM-approved activity will be allowed to continue during the appeal process.

Where can you file an appeal?

If you wish to file an appeal (petition for administrative review), you must do so in writing. To access the petition form and more information on filing a petition with OALP, visit their website at <https://www.in.gov/oalp/>. Submit your petition form electronically as directed on the OALP website, or send or deliver it to:

**Office of Administrative Law Proceedings
100 North Senate Avenue, Suite N802
Indianapolis, IN 46204**

If you file an appeal, also please send a copy of your appeal letter to the IDEM contact person identified in the Notice of Decision, and to the applicant (person receiving an IDEM permit, or other approval).

Your appeal must be received by OALP in a timely manner. The due date for filing an appeal may be given, or the method for calculating it explained, on the accompanying Notice of Decision (NOD). Generally, appeals must be filed within 18 days of the mailing date of the NOD. To ensure that you meet this filing requirement, your appeal request must be:

- 1) Delivered in person to OALP, by the close-of-business on the eighteenth day (if the 18th day falls on a day when OALP is closed for the weekend or for a state holiday, then your petition will be accepted on the next business day on which QALP is open), or
- 2) Given to a private carrier who will deliver it to the OALP on your behalf, (and from whom you must obtain a receipt dated on or before the 18th day), or
- 3) For those petitions sent by U.S. Mail, your letter must be postmarked by no later than midnight of the 18th day, or
- 4) Submitted using OALP’s online petition form, available at <https://www.in.gov/oalp/>

What are the costs associated with filing an appeal?

The OALP does not charge a fee for filing documents for an administrative review or for the use of its hearing facilities. A cost that could be associated with your appeal would be for attorney’s fees. Although you have the option to act as your own attorney, the administrative review and associated hearing are complex legal proceedings; therefore, you should consider whether your interests would be better represented by an experienced attorney.

What can you expect from the Office of Administrative Law Proceedings after you file for an appeal?

The OALP will provide you with notice of any prehearing conference, preliminary hearings, hearings, “stays,” or orders disposing of the review of this decision. In addition, you may contact the OALP by phone at 1-800-457-8283 with any scheduling questions. However, technical questions should be directed to the IDEM contact person listed on the Notice of Decision.

Do not expect to discuss details of your case with OALP other than in a formal setting such as a prehearing conference, a formal hearing, or a settlement conference. The OALP is not allowed to discuss a case without all sides being present. All parties to the proceeding are expected to appear at the initial prehearing conference.



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Eric J. Holcomb
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Commissioner

July 16, 2024

NOTICE OF DECISION

Please be advised the Indiana Department of Environmental Management (IDEM) has issued a Land Application Permit to Biocycle, LLC, 3788 East 300 South, Columbus, IN, Permit No. IN LA 000915. This Hybrid Land Application Permit allows Biocycle, LLC to accept biosolids and industrial waste products at their storage structure in Bartholomew County for blending and to land apply the blended biosolids and/or industrial waste products to agricultural land in Bartholomew, Decatur, Jackson, Jennings, Johnson, and Shelby Counties. For specific information concerning their land application program, contact Evan Daily, Biocycle, LLC, at (812) 374-2946 or edaily17@gmail.com. If you have any questions regarding the permit process, contact Brenda Stephanoff, the environmental manager assigned to this permit, at (317) 233-0472 or bstephan@idem.IN.gov.

You are receiving this notice because you either submitted comments during the public comment periods or have been identified by the permittee as a party to which notice of this Agency's decision should be given in accordance with the Administrative Orders and Procedures Act (AOPA), IC 4-21.5 and are hereby notified of such decision. You may own or reside at property adjoining or near the acreage participating in this recycling program.

If you wish to challenge this decision, IC 13-15-6-1 and IC 4-21.5-3 require that you file a Petition for Administrative Review with the Office of Administrative Law Proceeding (OALP). If you seek to have the effectiveness of the permit stayed during the Administrative Review, you must also file a Petition for Stay (see 315 IAC 1-3-2). The Petition(s) must be submitted to the OALP at the address below within 15 days of the date of this Notice if you received this notice via e-mail or 18 days if you received this notice by U.S. Mail:

Office of Administrative Law Proceeding
100 North Senate Avenue, Suite N802
Indianapolis, IN 46204

The Petition(s) must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision, or otherwise entitled to review by law. Identifying the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, or date of this notice will expedite review of the petition. Additionally, IC 13-15-6-2 and 315 IAC 1-3-2 require that your Petition include:

1. the name, address, and telephone number of the person making the request;
2. the interest of the person making the request;



Visit on.IN.gov/survey or scan the QR code to provide feedback.

We appreciate your input!



3. identification of any persons represented by the person making the request;
4. the reasons, with particularity, for the request;
5. the issues, with particularity, for the request;
6. identification of the permit terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing permits of the type granted or denied by the Commissioner's action; and
7. a copy of the pertinent portions of the permit, decision, or other order for which you seek review, at a minimum, the portion of the Commissioner's action that identifies the person to whom the action is directed and the identification number of the action.

Pursuant to IC 4-21.5-3-17, any document serving as a petition for review or review and stay must be filed with the OALP. Filing of such a document is complete on the earliest of the following dates:

1. the date on which the petition is delivered in person to the OALP;
2. the date of the postmark on the envelope containing the petition, if the petition is mailed by United States mail; or
3. the date on which the petition is deposited with a private carrier, as shown by a receipt issued by the carrier, if the petition is sent by private carrier;
4. Submitted using OALP's online petition form, available at IN.gov/oalp.

Pursuant to IC 4-21.5-3-17, the OALP will provide you with notice of any pre-hearing conferences, preliminary hearings, hearings, stays, or orders disposing of the review of this decision if you submit a written request to the OALP at the above address. If you do not provide a written request to the OALP, you will no longer be notified of any proceedings pertaining to this decision.

For additional information on filing a petition with OALP, visit their website at IN.gov/oalp.

Public records for this facility are available in IDEM's Virtual File Cabinet (VFC) at <http://vfc.idem.in.gov/>. Documents related to this approval can be found by selecting the "Solid Waste Program ID" in the "Quick Search" field (in the upper right-hand corner of the page) then enter the permit number, 000915.

Please bring the foregoing to the attention of persons whom you know would be interested in this matter.

Sincerely,



Brenda Stephanoff, Senior Environmental Manager
Solid Waste Permits Section
Office of Land Quality

The Indiana Department of Environmental Management (IDEM) received an application for a hybrid land application permit and notification to construct and operate a concrete storage structure from Biocycle LLC on December 21, 2023. Public comments and questions submitted in writing, as well as those given orally at the public hearing held on April 16, 2024, have been reviewed by IDEM staff. Biocycle LLC applied for a hybrid land application permit to land apply blends containing biosolids and potentially industrial waste products to agricultural land in Bartholomew, Decatur, Jackson, Jennings, Johnson, and Shelby Counties. Sites identified in the permit application as site-specific sites are located in Bartholomew County. The application has been reviewed and determined to meet the requirements in 327 IAC 6.1 and therefore IDEM has made the decision to issue a permit to Biocycle LLC. The notification to construct and operate the storage structure has been found to meet the requirements in 327 IAC 6.1-8.

GENERAL INFORMATION

The Solid Waste Permits Section is responsible for determining the acceptability of biosolids, treated sewage sludge, and industrial waste products for disposal via land application. Biosolids are nutrient-rich organic materials produced from the treatment and stabilization of sewage that meet specific quality criteria and are suitable for land application. Treatment processes differ at each wastewater treatment plant, resulting in various forms of biosolids such as liquids, cakes, or dried pellet-like products. Industrial waste products are waste materials that by definition are a solid waste, determined to be nonhazardous, have a total solids of greater than one percent, and provides a benefit to the soil (such as contains nutrients needed for crop growth, adjust soil pH, or a soil conditioner). Land application in Indiana is regulated by Indiana Administrative Code 327 IAC 6.1 (digital version available at: [Indiana General Assembly - Indiana Register](#)). Violations of the conditions set forth in a land application permit and 327 IAC 6.1 are enforceable offenses under Indiana law at Indiana Code (IC) 13-30-3 and IC 13-14-2-6.

Land application permits are issued to the generator of the waste product. Facilities, including the proposed Biocycle LLC facility, that blend two or more waste products can be the generator of the newly created waste product and can then be the permittee. We identify these facilities as a “regional biosolids center” (RBC). Consolidation of waste handling is a trend recognized in many areas of waste management, including transfer stations (for municipal solid waste) and land application. Such trends result, in part, from increased waste handling costs brought on by increased regulatory requirements. When the land application regulations were adopted in 1998, IDEM recognized that the increased regulatory burden would weigh most heavily on small facilities land applying biosolids or industrial waste products. As this increased burden would likely force many such facilities to turn to other non-recycling means of disposal, it was decided that the already observed trend towards regional facilities accepted by federal land application regulations must be addressed in the development of Indiana’s regulation. The result was the allowance in the regulation for the permit holder to be a regional facility where waste materials can be blended and land applied, taking some of the regulatory burden off small generators while continuing to encourage recycling of acceptable waste streams via land application. Indiana currently has eight of these facilities providing this service.

Under a land application permit, an RBC is approved to accept biosolids that meet specific quality criteria including pathogen reduction and heavy metal concentration limits, and industrial waste products after IDEM approval of the specific waste stream.

327 IAC 6.1 also applies to structures for the storage of biosolids, industrial waste products, and pollutant-bearing water (treated wastewater). 327 IAC 6.1-8 sets criteria for structures and has two programs, one is a notification program the other is a permit program. Certain types of structures that meet the specific criteria qualify to submit a notice to construct and operate a structure. The notice must be submitted to IDEM at least thirty days prior to construction or installation of the storage structure. With this program, a structure must be located no less than 1,000 feet of any neighboring residence or public building, 300 feet of any surface water or surface conduit to a subsurface feature (such as a field tile inlet), and 200 feet of any well. IDEM's role is limited to reviewing the application, requesting additional information if we determine the application is incomplete or did not provide enough information for us to determine the proposal complies with the regulation. If the application shows the design and location of the structure complies with the regulation, we provide the applicant with a letter of acknowledgement.

All comments submitted have been considered in the decision to issue this permit. The following responses have been prepared to address the comments and questions submitted. IDEM received comments from approximately 100 people and those comments that are similar in nature have been combined into categories and responded to as a group. Other comments are individually addressed.

REQUEST TO DELAY/DENY THE PERMIT APPLICATION

Many **comments** were submitted asking IDEM to deny the permit because they objected to the structure and land application of biosolids and/or industrial waste products near their property.

Response: Indiana Law as written in IC 13-15-4 requires IDEM to review a permit application and if that application complies with the applicable regulations in which the proposed activity is governed by, IDEM must approve/issue a permit within a specific time period as identified in IC 13-15-4-1. IDEM can only deny an application when the application fails to meet the requirements of the regulation and the applicant fails to submit additional information when requested.

Biocycle has not demonstrated an unwillingness or inability to comply with the 327 IAC 6.1 or information IDEM has requested.

The permit application or approval of a land application site cannot be denied if a land application site is within the setback distance of specific features such as 200 feet of a potable well, 300 feet of surface water, or 300 feet of a residence. When a site is within the distance of the specific feature(s), the facility is required to maintain the required setback distance.

SUPPORT

Comments were received in support of approving the permit. IDEM appreciates all comments.

ODORS

Multiple **comments** were received regarding odors from land application activities and odors from the storage structure.

Response: While odors are recognized to be associated with some land application activities, the control of odors is not within the regulatory scope of 327 IAC 6.1, and therefore is not addressed in the land application permit. A permit application cannot be denied based on the potential for odor.

The EPA Rule 12 was mentioned in at least one of the comments submitted. Some EPA regulations are self-implementing which means facilities are automatically required to follow EPA regulations even when a permit document is not issued. Biocycle will be required to follow all federal, state, and local laws and/or regulations that may be applicable to the activities they conduct. It is also up to those applicable federal, state, and local entities to enforce those regulations.

NOISE

Comments were submitted with concern about noise.

Response: Noise is not within the regulatory scope of 327 IAC 6.1, and therefore is not addressed in the permit.

RUNOFF CONCERNS

Comment: One of the main concerns noted was the potential for runoff from land application sites and the storage structure. These comments included concerns regarding rainwater moving biosolids and/or industrial waste products off site, well contamination, and runoff to surface waters (Brush Creek watershed).

Response: 327 IAC 6.1-3-3 prohibits the discharge of biosolids, industrial waste products, or pollutant-bearing water into surface waters or ground water from a land application operation (including land application sites and storage structures, 327 IAC 6.1-8-7). Any runoff of these materials into surface water or seepage into the ground water is a violation and is enforceable under IC 13-30-3 or IC 13-14-2-6.

For land application site concerns: Soil laden runoff that carries nutrients or pollutants can occur whenever fields are fertilized with commercial fertilizer, manure, biosolids, or applied with pesticides, herbicides, etc. However, runoff controls are incorporated into the land application regulations through the use of setbacks to residences, wells, and surface waters (including a surface conduit to a subsurface feature) and slope restrictions. By observing these setbacks and management practices, the potential for runoff is minimized.

Biocycle's preferred method of land application will be by incorporating the biosolids and/or industrial waste products into the soil at the time of land application which will further reduce the potential for contaminated runoff from the field. If the method of application is by surface application, the set-back distances increase for some features and the slope of the field must be decreased to 12 percent or less.

STOCKPILING/LAND APPLICATION ON FROZEN/SNOW COVERED GROUND

Comment: The permit application indicates Mr. Daily may stockpile biosolids on land for up to 90 days. How will this stockpile be managed for odor control, insects, airborne dust, leachate into our waterways and aquifers that deliver water to our homes? Biocycle's application is not transparent about its plans to store the biosolids in bermed holding areas for up to 90 days under 327 IAC 6.1-4-8.

Response: As a part of the permit application, Mr. Daily has submitted a Stockpiling Management Plan in which he indicates stockpiles will be 660 feet away from residences or public businesses unless a signed waiver from the owner or tenant has been obtained, 660 feet from potable wells or drinking springs, and 300 feet from surface waters or surface inlet to a subsurface drainage system. The management plan indicates there will be no stockpiling in a flood plain or areas where the soil stays saturated for extended time periods after heavy rain events. Stockpiling must take place on areas of the site with a 2% slope or less. A dirt or lime berm will be constructed around the stockpiled biosolids as a form of runoff control. They will attempt to limit the length of time biosolids are to be stockpiled, especially during the summer due to higher temperatures. They may sprinkle lime over the stockpiled biosolids at times to help prevent odors and repel insects. They will be cautious of wind patterns and the distance to residences/businesses when selecting their stockpile locations. Upon review of this management plan, IDEM felt additional controls were needed and added conditions to the permit. The additional conditions were communicated to Mr. Daily. Failure to follow the management plan as written in the permit is grounds for Enforcement action.

Comment: 327 IAC 6.1 Applicant states "application sites will be chosen carefully with nearby residences/businesses and wind patterns in consideration". The proposed structure and land application on DADS EAST and DADS WEST is not in an isolated area. Residences and businesses to the north in close proximity of the land application and storage structure will receive contamination based on wind direction. There are no wind breaks in this area, low flat farm fields. Winds come out of the SSW most of the year. If wind patterns are a consideration then Mr. Daily will not be able to land apply in our area during spring, summer and fall. Odor nuisance and dried biosolid particles will infiltrate this area. How is this proposed permit allowed in a very populated area?

Response: The quoted statement is regarding land applying to frozen or snow-covered ground and stockpiling at the land application site. If the applicant wants these options, they are required to complete the management plans that detail how they will manage the biosolids and/or industrial waste products under these conditions. Mr. Daily has indicated he will take wind patterns and proximity to residences/businesses into consideration when selecting a field or portion of a field for stockpiling and/or land applying to frozen or snow-covered ground. This is not a requirement of 327 IAC 6.1.

BIOSOLIDS AND WASTEWATER QUALITY

Comments were submitted regarding the quality of biosolids, and the impact industrial waste discharged to wastewater treatment plants (WWTP) has on biosolids.

Response: Sections 402 and 405 of the Federal Clean Water Act, 40 CFR Part 125, and Indiana's regulation under 327 IAC 5 require all municipal wastewater treatment plants and other entities that discharge to Waters of the U.S. and Waters of the State to obtain a National Pollutant Discharge Elimination System (NPDES) Permit. These regulations have numerical and categorical standards and require routine sampling on the influent (wastewater entering the WWTP), effluent (treated wastewater discharged to Waters of the State), and sludge. Pretreatment standards under 40 CFR Part 403 and 327 IAC 5 require industries that discharge to a WWTP meet specific quality prior to discharge. Industries can and have been held responsible for discharges that interfere with the operation of the WWTP. Annually, WWTPs are required to conduct an inventory of priority pollutants based on 40 CFR Part 423, appendix A and identify and quantify additional organic compounds which may occur in the influent, effluent and sludge. Reports generated from this data are required to be submitted to Indiana's Pretreatment Program within the Office of Water Quality (OWQ). While 40 CFR Part 503 requires sampling biosolids for a limited number of contaminants, the other regulations listed above cover a larger number of constituents. In addition, biosolids must meet applicable criteria for land application.

Comment: Just recently in our local paper, our WWTP discovered a local company was non-compliant with its permit. The company exceeded limits on levels of oil and grease in wastewater and BOD. The company was given a compliance deadline by July 2025. How did this happen and how can we be assured this sludge with toxic oil and grease will not be incorporated into the soil within this permit?

Response: IDEM research found an article indicating the 9th Avenue Foods, which produces milk-based products, discharged food grade oil and/or grease that had a high biological oxygen demand (BOD) value. Waste from food grade products do not typically have a negative impact on the quality of biosolids or make them a hazardous waste. While outside the scope of this land application permit action, it would appear that the requirements of the wastewater treatment plant's NPDES permit and staff following their permit allowed them to find the issue and address it in a timely manner. If a discharge to the WWTP is of a waste that interferes with the operation of the plant, and the biosolids do not meet the quality criteria for land application, the biosolids would need to be disposed of at a landfill.

LACK OF TESTING/REGULATION CONCERNS

Comment: I request the applicant supplies certified initial Pollutant limits and Pathogen levels to understand the health risk.

Response: Since this is a new facility that is not constructed or operating yet, it is not possible for Biocycle to provide analytical data of the blended biosolids and/or industrial waste products that will be land applied under this permit. Biocycle is required to provide

initial heavy metals, nutrients, and fecal coliform test results prior to the commencement of land application.

Comments were submitted about the lack of testing required by EPA. That there are over 300 chemicals in biosolids that EPA doesn't require testing for. EPA is reviewing testing standards for sewage sludge and IDEM should wait until new standards are out before making a decision on the Biocycle permit application. Lack of testing for pharmaceuticals, antibiotics and antibiotic resistant bacteria, illegal drugs such as methamphetamine, Per- and Polyfluoroalkyl Substances (PFAS), or persistent organic pollutants (POPs) such as dioxins. There is a lack of formal studies to understand the long-term impact of toxic pollutants that persist in the environment on people and animals.

Response: The 700 plus chemicals that were referenced were identified during the three National Sewage Sludge Surveys that have been conducted to date (1988 National Sewage Sludge Survey, 2001 National Sewage Sludge Survey, and the 2006 Targeted National Sewage Sludge Survey). The EPA biennial review process in Section 405(d) of the Clean Water Act requires that the EPA develop and publish regulations providing guidelines for the disposal and utilization of sludge (biosolids). This section requires that the EPA shall identify those toxic pollutants which, on the basis of available information on their toxicity, persistence, concentration, mobility, or potential for exposure, may be present in sewage in concentrations which may adversely affect public health or the environment, and propose regulations specifying acceptable management practices for sewage sludge containing each such toxic pollutant and establishing numerical limitations for each such pollutant. The biennial reviews are conducted to identify the publicly available data on both previously and newly identified pollutants in biosolids. Please note, this includes the chemicals that were found in previous biennial reviews and sewage sludge surveys. Biennial reviews are published every two years with data that may be used to conduct risk assessments on the pollutants that are identified as having concentrations which may adversely affect public health or the environment. EPA uses risk assessments to characterize the nature and magnitude of health risks to humans and ecological receptors (e.g., plants and animals) from chemical contaminants and other stressors that may be present in the environment. 40 CFR Part 503 was developed based on the results of risk assessments to identify what, if any, risks were associated with the use or disposal of biosolids via land application. The list of more than 700 chemicals that were identified to be in biosolids have been reduced to the list of pollutants identified in 40 CFR Part 503 and 327 IAC 6.1 that must be monitored and the concentration limits acceptable for land application. As previously stated, the NPDES and Pretreatment Programs require testing of influent, effluent, and sludge for the list of priority pollutants.

PFAS (Per- and Polyfluoroalkyl Substances)

Comments: Concerns regarding a lack of testing for Per- and Polyfluoroalkyl Substances (PFAS), Maine's legislature restricting biosolids land application due to PFAS, and as recently as 2021 it was reported that the Columbus treatment facility was in violation of the federal standards for PFAS and had exceeded the acceptable levels. Health issues related to PFAS.

Response: IDEM is aware of the concerns with PFAS, however, there are no federal or state limits set for biosolids and land application. EPA is currently conducting a risk assessment for PFAS found in biosolids and the potential impact on soils and crops where biosolids are land applied. The results of this study are expected to be published by the end of 2024. Once the EPA publishes their final decision, IDEM will follow EPA's requirements.

To respond to the comment regarding the Columbus treatment facility being in violation of the federal standards for PFAS. This comment appears to be regarding drinking water standards. IDEM's OWQ provided information that one of the City's wells did have high PFAS detected and that specific well has been taken offline. The finished drinking water is now below the maximum contaminant level (MCL) for PFOA and PFOS. In April of 2024, EPA issued the first-ever national, legally enforceable drinking water standard for PFAS compounds. This regulation became effective on June 25, 2024, and will require water treatment plants to meet specific requirements by 2029. There are currently no limits or restrictions on the use or disposal of biosolids based on PFAS and therefore IDEM cannot deny a permit application for this reason.

To respond to the comment regarding Maine's decision to ban the land application of biosolids due to PFAS concerns. That is a true statement, however the Indiana Legislature, along with many other states, have not taken that position.

In response to comments regarding health concerns associated with PFAS exposure, IDEM understands the concerns. However, as there are currently no applicable PFAS limits, IDEM cannot deny the permit application for this reason.

COMMUNITY HEALTH CONCERNS

Comments were submitted regarding the possibility that biosolids may cause a threat to human health.

Response: The United States Environmental Protection Agency (EPA) conducted sewage sludge surveys to determine types of treatment processes utilized and the level of pathogen destruction as well as an extensive risk assessment on biosolids during development of federal land application regulations (40 CFR Part 503) to protect public health and the environment. Risk assessments were conducted for application of biosolids onto agricultural land and included items such as exposure pathways as direct consumption of biosolids by children, movement of pollutants into the groundwater and uptake of pollutants by crops. The risk assessments form the basis for biosolids pollutant loading limits specified in state and federal land application regulations.

Biosolids that are land applied must meet either Class A or Class B pathogen reduction. While Class A pathogen reduction requirements are more stringent, both classes are considered to be protective of public health when land applied in accordance with land application regulations. Biosolids that are land applied must meet one of the ten vector attraction reduction requirements in 327 IAC 6.1-4-15. These requirements are designed to reduce the characteristics of the biosolids that attract vectors such as mosquitoes and flies that could carry any remaining pathogens away from the field. When Class B

biosolids are applied, the applicator and farmer must also comply with the management practices that restrict harvesting of crops and access by the public and animals for a period of time based on various factors.

Through the wastewater treatment process, pathogens are removed from the treated wastewater and concentrated in the sewage sludge. The sewage sludge then goes through a digestion process to treat/reduce the pathogen content. Pathogens can only survive under certain conditions. Outside of those conditions, the number of pathogens will significantly decrease. Prior to treatment, sewage sludge potentially contains four major types of human pathogenic organisms: bacteria, viruses, protozoa, and helminths (parasitic worms). The actual species and density of pathogens present in wastewater from a particular treatment facility (and the biosolids produced when treating the wastewater) depend on the health status of the local community and may vary substantially at different times. Viruses, helminths, and protozoa cannot re-grow outside their specific host organism(s). It has been determined that each pathogen species has a different tolerance to different conditions. Pathogen reduction requirements are based on the need to reduce all pathogenic populations. Some of the factors that influence the survival of pathogens include pH, temperature, competition from other microorganisms, sunlight, contact with host organisms, proper nutrients, and moisture level. The level of pathogens present in biosolids also depends on the reductions achieved by the wastewater and biosolids treatment processes. There are several methods of demonstrating that pathogen reduction has been achieved. 40 CFR Part 503 contains specific requirements designed to ensure that re-growth of bacteria does not occur prior to use or disposal of the biosolids. If the generator can show at least one of those methods have been met, they are in compliance with the federal and state pathogen reduction requirements.

One such method of demonstrating that pathogen reduction has been met is through analysis for indicator organisms such as fecal coliform. The sampling method approved by EPA involves collecting seven samples of the biosolids and having each sample analyzed for fecal coliform. These samples must be collected over a period of not more than fourteen days and each sample analyzed within 24 hours of sample collection. The results of the seven samples must show a geometric mean of less than two million colony forming units (CFU) or most probable number (MPN) of fecal coliform per gram of total solids. Biocycle has indicated they intend to utilize fecal coliform sampling to confirm pathogen reduction, and they will be required to analyze for fecal coliform and ensure they are below the two million CFU or MPN limit prior to land application. The biosolids must also be documented to meet pathogen reduction prior to Biocycle receiving them for blending. Biocycle will be required to provide this documentation in monthly reports to IDEM.

For "Class B" biosolids, the type to be applied by Biocycle, site restrictions that limit crop harvesting, animal grazing and public access for specific periods of time must be observed. This allows environmental factors to further reduce pathogens. Additionally, harvesting restrictions are imposed based on the location in the soil of the harvested part of the crop and the placement of the biosolids. For example, if biosolids are surface applied and then remain on the land surface for less than four months prior to incorporation into the soil, a food crop that has harvested parts below the soil surface

cannot be harvested for at least thirty-eight months after application of the biosolids. Another precaution in the transmittal of disease-causing organisms is the control of vectors. Vectors are defined as animals and insects (e.g., rodents, flies, birds) that might be attracted to biosolids and therefore could transmit any remaining pathogenic organisms to humans. Vector attraction reduction is required to be met either in the treatment process, prior to land application taking place, or during land application by injecting or incorporating the biosolids into the soil.

Comment: Biocycle should be required to comply with Class B, Alternative 2 and treat the biosolids by one of the processes to significantly reduce pathogens - such as aerobic digestion. If Biocycle is allowed to proceed with Class B, Alternative 2, the samples should be conducted by an independent environmental consultant. Any testing of pollutant limits performed by Biocycle's employees would be unreliable.

Response: Biocycle is not a treatment facility; they will accept dewatered biosolids that have been treated to meet the Class B pathogen reduction standards required in state and federal regulations. Regulatory programs rely on self-monitoring and failure to comply with the permit or regulations are enforceable.

BIOAEROSOL

Comment: Concerns were raised about the potential for pollutants and pathogenic organisms becoming airborne and blowing off the storage structure or land application site.

Response: EPA also addressed the risk of airborne microorganisms that could contain pathogenic organisms. (EPA/600/R-11/020 April 2012) Class B Biosolids in one study had 28 percent solids and 2.3×10^9 CFUs of fecal coliforms/g dry weight, in addition to other pathogens typically found in biosolids. Fecal coliforms, E. coli, Salmonella spp., S. aureus, C. perfringens, Enterococcus spp., and coliphage were not detected in any of the bioaerosol samples collected at the stationary sampling locations on the site either in the control trial or during biosolids application. These organisms also were not detected in any of the samples collected by the mobile sampler. No positive results were found for enteric virus in the plaque-forming units (PFU) and most probable number (MPN) analyses conducted on these initial samples.

ENDANGERED SPECIES

Comment: Mr. Daily indicates the land application will not violate the endangered species regulation. However, we have bats that roost in our area in barns and sheds. Bald Eagles nest in our area as well as other locations Mr. Daily will be applying the sludge. Is IDEM willing to threaten the protection of endangered species?

Response: Comments were received stating that the area where the facility and land application sites are located in proximity to endangered species. Biosolids are required to meet vector attraction reduction requirements to prevent animals/insects from being attracted to them. The proposed facility will be partially enclosed and covered to help prevent wildlife attraction.

Comment: A request was made that the FWS Endangered Species Protection Program in Washington DC or one of the FWS Field Offices be contacted and a formal endangered species review is conducted.

Response: This is not a requirement of 327 IAC 6.1 or 40 CFR Part 503 prior to issuing a permit, however any citizen is welcome to reach out to FWS with their concerns.

LANDFILL LEACHATE

Comment: A concern was raised regarding the City of Greensburg Wastewater Treatment Plant accepting leachate from Decatur Hills, Inc (landfill).

Response: Decatur Hills, Inc. operates in accordance with 329 IAC 10 under the Solid Waste Program ID 16-03 renewed on August 1, 2023. This facility also obtained authorization to discharge their leachate to the City of Greensburg in accordance with the city's Sewer Use Ordinance No. 1995-3. This authorization to discharge requires the landfill to collect samples of the leachate and have them analyzed for pH weekly; TSS, BOD, cadmium, chromium, copper, cyanide, lead, molybdenum, nickel, mercury, and zinc monthly, and TTO parameters twice annually (June and December). The list of TTO parameters can be found in 40 CFR Part 433. The City's pretreatment program is beyond the scope of this permit action. Biocycle will be required to comply with all applicable criteria for land application under 327 IAC 6.1.

INCREASED TRAFFIC

Comments were submitted regarding increased traffic including damage to roads, intersection safety, obstructed views/limited visibility, and biosolids/mud tracked onto roadways.

Response: Regulation of trucks and truck traffic associated with land application of biosolids and/or industrial waste products is outside of the scope of regulatory authority of 327 IAC 6.1 and cannot be considered in the issuance of a land application permit. However, it is the responsibility of Biocycle, LLC to comply with applicable federal, state, and local laws and regulations pertaining to trucks and the transporting of materials on Indiana roads and highways.

Biosolids must be applied to the field within the boundary of any required setback limits. Biosolids must not leave the field. Biocycle must take the steps necessary to prevent biosolids and/or industrial waste products from being taken off the field from vehicle use. Dirt/mud tracked onto roads would be similar to normal farming practices and is not regulated under 327 IAC 6.1.

SPILLS

Comments were received regarding how spills and cleanup will be handled during transportation and storage of biosolids.

Response: 327 IAC 2-6.1 requires any person who operates, controls, or maintains any mode of transportation or facility from which a spill occurs shall, upon discovery of a reportable spill to the soil or surface waters of the state, do the following:

1. Contain the spill, if possible, to prevent additional spilled material from entering the waters of the state.
2. Undertake or cause others to undertake activities needed to accomplish a spill response.
3. As soon as possible, but within two hours of discovery, communicate a spill report to the Indiana Department of Environmental Management, Office of Land Quality, Emergency Response Section at (888) 233-7745 for in-state calls (toll free), or (317) 233-7745 for out-of-state calls. If new or updated spill report information becomes known that indicates a significant increase in the likelihood of damage to the waters of the state, the responsible party shall notify the department as soon as possible but within two hours of the time the new or updated information becomes known.
4. Submit to the Indiana Department of Environmental Management, Office of Land Quality, Emergency Response Section (MC 66-30), 2525 N. Shadeland Ave., Suite 100, Indianapolis, IN 46219-1787, a written copy of the spill report if requested in writing by the department.
5. Except from modes of transportation other than pipelines, exercise due diligence and document attempts to notify the following:
 - a. For spills to surface water that cause damage, the nearest affected downstream water user located within 10 miles of the spill and in the state of Indiana; and
 - b. For spills to soil outside the facility boundary, the affected property owner or owners, operator or operators, or occupant or occupants. In the event of a spill, the facility is required to call IDEM's emergency response line as soon as possible, but no later than two hours after discovery, after learning of any event that may cause imminent and substantial endangerment to human health and the environment.

HOME VALUE

Comments were submitted regarding home and property values near the storage structure and land application sites.

Response: Consideration of property values in the area of a land application site or storage facility is not within the regulatory scope of 327 IAC 6.1 and cannot be considered in this Agency's permit decision.

CERTIFIED OPERATOR/EXPERIENCE

Comment: The operator's level of relevant experience operating a biosolid storage facility. Are all employees certified to handle biosolids? Who is responsible for the certification and monitoring safe work practices.

Response: 327 IAC 6.1-4-3 requires that land application of biosolid or industrial waste product be conducted under the supervision of a certified wastewater treatment plant operator licensed under 327 IAC 5-22, or a person with at least one year of experience in land application management practices and procedures as demonstrated by specific facts contained in a signed affidavit. Evan Daily has completed Part XII. Affidavit – Certified Operator Equivalent indicating that he has at least one year of experience in land application management practices and procedures and that he is familiar with the requirements of 327 IAC 6.1. Mr. Daily gained his experience through land applying biosolids in conjunction with the local municipality. This experience is sufficient to satisfy the requirements to be certified operator equivalent and operate a land application operation (including the blending, storage, and land application of biosolids and industrial waste products).

IDEM does not require more than one certified operator or operator equivalent because this person is required to oversee land application activity and the employees conducting the activity under 327 IAC 6.1. As the permittee and certified operator equivalent, Mr. Daily is ultimately responsible for all activities conducted in accordance with the permit and 327 IAC 6.1.

Comment: Biocycle's applications states that the biosolids are going to be applied by Evan Daily and other employees of Biocycle LLC, but they have not established that they have the proper training or expertise for physically or chemically treating solids from wastewater to produce a semi-solid, nutrient-rich product that can be beneficially used.

Response: Biocycle will not be treating solids from wastewater to produce a semi-solid, nutrient-rich product that can be beneficially used. Under this permit Biocycle is allowed to accept the treated solids from wastewater treatment facilities that already meet the quality standards required for land application.

GENERAL QUESTIONS

Comment: How will the Clean Water Act (CWA) and Clean Air Act (CAA) affect this facility.

Response: The CWA establishes the basic structure for regulating the discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. Any discharges to surface waters requires the facility to obtain a National Pollutant Discharge Elimination System (NPDES) permit from IDEM's OWQ. Failure to obtain an NPDES permit and to discharge to surface waters is an enforceable violation of 327 IAC 5 and the CWA. Under the CWA, EPA has developed the Standards for the Use or Disposal of Sewage Sludge (40 CFR Part 503). These standards are used to create the regulations that this facility must follow. The CAA is a comprehensive federal law that

regulates air emissions to protect public health and public welfare and to regulate emissions of hazardous air pollutants. Because these are federal laws, this facility will be required to follow any applicable to their facility/program.

Comments were received with a concern about the potential for lack of adherence to controls over the content, processing, storage, and application of this “sludge”, and how it could easily result in unintended pathogens and chemicals being land applied and spread to adjacent properties through air, water, or dust/debris.

Response: 327 IAC 6.1-4-3(b) requires that any person who prepares or applies a biosolid or industrial waste product shall ensure that the applicable requirements in this article and the permit are met when the biosolid or industrial waste product is prepared for application to the land or applied to the land. If a permit application meets all requirements for a permit, IDEM cannot withhold approval based on speculation that the applicant may violate the permit in the future. Any permit noncompliance is subject to IDEM’s enforcement laws.

Comment: Mr. Daily's letter states the biosolids have been used as a part of his fertilization program for 20 years. Why is it necessary for a land application permit if Mr. Daily has been applying biosolids for years?

Response: Mr. Daily has been land applying biosolids generated at the Columbus Wastewater Treatment Plant under the City of Columbus’ permit for 20 years. He now wants to have his own operation/business instead of contracting with the City of Columbus Utilities, and therefore must apply for his own permit.

Comment: How does it work if the landowner currently agrees, but later decides not to accept the biosolids for spreading?

Response: The agreement to allow the land application of biosolids and/or industrial waste products to a field is between the permittee (Biocycle in this case) and the landowner. IDEM requires the landowner to sign a land use agreement to show they allow the permittee to land apply to their property. IDEM does not force or require a landowner/farmer to continue taking biosolids and/or industrial waste products if they no longer want it applied on their property.

Comment: How often will sampling occur? Who is responsible for testing and reporting composite samples? Biocycle should be required to hire a 3rd party to conduct sampling. What if a load falls outside the limits at the storage/mixing. Are there different testing standards for industrial waste versus domestic waste?

Response: Prior to Biocycle initially accepting any biosolids or industrial waste products, Biocycle is required to obtain analytical data from each source reporting the concentrations for heavy metals, nutrients, PCBs, and total solids. They are also required to conduct routine sampling of these parameters from each source. For biosolids they are also required to obtain documentation showing the biosolids meet pathogen reduction requirements. If the biosolids will be surface applied, they must obtain documentation showing compliance with one of the vector attraction reduction requirements.

Prior to Biocycle accepting an industrial waste product from a new source, they must submit documentation to IDEM requesting approval to accept the industrial waste product. This documentation includes either analytical data or generator knowledge that the waste was determined to be nonhazardous, does not contain volatile organic compounds (VOCs), or semi-volatile organic compounds (SVOCs).

Biocycle is required to sample each batch of blended biosolids and/or industrial waste products generated for heavy metals, nutrients, PCBs, fecal coliform (as indicated in the permit) and total solids prior to land application. State and federal land application regulations do not require a facility to contract with a third party for sample collection. Private laboratories require a chain of custody form to accompany each set of samples collected and sent to the laboratory. These chain of custody forms include date sample collected, request parameters to analyze for, name of person collecting the sample, preservative used, and date shipped/sent to laboratory. IDEM reviews the laboratory reports including the chain of custody forms to confirm sample(s) meet the requirements in 327 IAC 6.1.

Biocycle is required to collect a small sample from each truck load of biosolids and/or industrial waste products received, known as tracer samples. Each sample must be labeled identifying the source and date. If any of their presample results indicate the sample exceeds any of the heavy metal concentrations, land application is prohibited. Further sampling must be conducted, and Mr. Daily must contact IDEM for instruction.

GENERAL FACILITY/PERMITTEE CONCERNS

Comment: Several comments were submitted regarding the qualifications and capabilities of Biocycle LLC to safely operate and maintain this operation; appropriate oversight and Biocycle LLC ability to operate safely and ethically. How does IDEM confirm this is a “trustworthy” business entity.

Response: Evan Daily submitted a signed affidavit indicating that he has the experience required to oversee a land application operation including storage of the biosolids and/or industrial waste products. This was confirmed through his land application work experience with the City of Columbus. To date, the City of Columbus has been in good standing with their land application permits. If Mr. Daily shows he is unable to comply with his permit and the regulations, IDEM can require Biocycle to hire a certified operator to oversee the land application operation. Noncomplying practices can result in enforcement action including fines, penalties, and revocation of the permit. Please note most regulatory programs (state and federal) have some form of self-monitoring/reporting. All permittees are required to submit monthly reports. These reports have been an effective way to ensure that the requirements of a permit have been met for several decades.

Comment: What other options have been explored for the disposal of county waste? Wastewater treatment plants should look into technologies that either treat sewage sludge to a higher quality or is a “zero-waste” system.

Response: IDEM is unaware of the options Biocycle or the City of Columbus explored prior to submitting the application for a land application permit. IDEM cannot dictate how

a utility chooses to treat or dispose of their biosolids. Both 327 IAC 6.1-1-3(c)(4) and Section 405(e) of the Clean Water Act reserve the choice of use and disposal practices to local communities, or the utility in this case.

Comment: Why have other countries and US states denied permission to these biowaste companies?

Response: The land application of biosolids is widely practiced throughout the US and in other countries across the world. IDEM is not aware of how other states operate their land application programs or the type of facilities they oversee. EPA considers facilities that accept biosolids from various sources to be a Class 1 Sludge Management Facility. Their website includes a list of 76 facilities (including those in Indiana) that generate/ land apply greater than 319 dry tons of biosolids per year. This list was updated November 21, 2023.

Comment: Several comments were received regarding trucking in waste from other counties, cities/towns, or states and how many different sources will Biocycle receive biosolids from.

Response: For this facility to become the generator of the material, they are required to blend two or more materials. It is up to Biocycle to determine the sources of the biosolids and/or industrial waste products in which they take in. However, Indiana Code 13-18-14-1 indicates that predominantly domestic sewage and surface run-off or sludges derived from domestic sewage or surface run-off may not be transported through any drain, pipe, railroad car, truck, or barge from another state into Indiana for use in any land filtration or land treatment project without the express approval of (1) The general assembly, and (2) The county executive of each county affected by the land filtration or transportation. Land application of class B biosolids can be considered further treatment and therefore, class B biosolids generated at facilities outside of Indiana are prohibited from being brought into Indiana when the ultimate disposal option is land application. Biocycle may take biosolids from any municipal or semi-public wastewater treatment facility within the state of Indiana because all biosolids are generated using a similar process and human activities are similar from county to county and therefore biosolids quality is similar throughout the state. It is currently unknown as to the sources Biocycle intends to accept biosolids and/or industrial waste products from. Prior to Biocycle accepting industrial waste products or biosolids from an industrial facility, they must submit specific documentation to IDEM for review and approval.

Comment: What is Biocycle's 5-year business plan for growth? How does this business benefit the community and local environment? Is reducing the cost of biowaste disposal to the City of Columbus the only consideration?

Response: A facility's five-year business plan for growth and the benefit to the community is outside of the regulatory authority of 327 IAC 6.1 and cannot be considered in this agency's permit decisions. It should be noted that any potential future growth of the facility would be required to meet the regulatory requirements and could require either obtaining additional permits or modifying their current permit.

Any business could be beneficial to the local community by providing jobs and tax revenue. Land application is a benefit to the soil and farmers whose fields receive the biosolids and/or industrial waste products. As previously mentioned IDEM is required to review an application and make a decision based on the criteria in 327 IAC 6.1.

Comment: What standards and regulations are in place to audit and monitor the company's performance? Is it well regulated and audited for process failures? Have fines or penalties ever been applied for violations?

Response: A company's performance is not regulated by IDEM. IDEM can only regulate the criteria outlined in 327 IAC 6.1. IDEM has taken enforcement action against entities that have submitted information in their monthly reports that have shown to violate a facility's permit. Prior enforcement action has resulted in fines.

Comment: "It was mentioned that they were capable of spreading human waste on other farmers' property. Does that mean that they are re-selling the product to said farmer? What are the regulations around them re-selling the product? How is it monitored when it is re-sold? Is it legal for them to sell the product?"

Response: Biosolids and/or industrial waste products can be land applied for free or at a cost to the farmer/landowner. It is up to the permittee as to whether they want to charge the farmer/landowner for the biosolids or industrial waste products. Biocycle, as the generator of the blended product, is responsible for that blended product until it is land applied or otherwise disposed. The farmer/landowner cannot take the biosolids and/or industrial waste product from Biocycle and then resell it to someone else.

Comment: IDEM received an e-mail addressed to Mayor Ferdon, Representative Meltzer, and Senator Walker requesting that there be a right to know session on biosolids and their impact. If a public meeting is warranted, how and when will our group be notified of the date, location and time?

Response: IDEM held a public meeting/hearing on April 17, 2024, and notice of the public meeting/hearing was issued more than 30 days prior to that date. The notice was posted on IDEM's Website, an email was sent to everyone who submitted written comments, and a hardcopy of the notice was sent to those listed in the permit application as potentially affected (who IDEM did not have an e-mail address for). During the public meeting portion, additional information was presented to the public about the biosolids program and allowed for comments and questions regarding the application. The public hearing portion allowed attendees to submit their comments and/or concerns regarding the proposed structure and land application program.

Comment: Comments were received regarding the public meeting/hearing held on April 17, 2024.

(1) "I attended the meeting/hearing on April 17th concerning the application to permit storage, blending and land application of biosolids and industrial waste products by Biocycle LLC. I was extremely disappointed that no provisions were made for people to even hear what was being said, let alone to see maps of where these activities would be taking place if this permit is issued. There are very

legitimate concerns about environmental contamination and public safety with the blending and release of potential toxins onto agricultural fields. IDEM is responsible to work with industry and the public to make sure no such contamination occurs. And yet, this felt like a required meeting, to check a box and steamroll forward with issuing a permit to the applicant.”

(2) “The lack of respect shown was overwhelming. No sound system, no visuals to help convey what was being discussed. Only spoken words, and those were not very audible to anyone in the audience. The attitude of the speaker projected was, this is just boilerplate comments we have to make, doesn't matter if you know what we are saying. Well, YES IT DOES! Your lack of respect is shameful.”

Response: IDEM values public participation and input in the permitting process. While not a codified requirement for this type of permit, IDEM may hold public meetings/ hearings to provide potentially impacted Hoosiers with an opportunity to speak and ask questions on the record about a proposed permit. When a public hearing is determined to be appropriate, IDEM will announce the time, date, and location through a public notice. The agency works to schedule public hearings at convenient times and locations for the residents who are affected by the matter.

Because meetings are held in differing locations each time to provide convenience to residents potentially impacted by the permitted facility, IDEM is not in control of the host location's audio/visual capabilities. In the specific instance, IDEM requested microphones and projection equipment, however it was unavailable. IDEM does not require large maps to be submitted and only has access to digital maps within our offices. Without projection equipment, IDEM could not provide maps or other visual documentation.

These technological hurdles are rare during the agency's public events. However, IDEM will examine procedures following this event to ensure consistent visual presentation at future meetings/hearings.

Question: Are the farmers, who are recipients of the biosolids land applications, aware of the restrictions that will be placed on them after land application? Are they aware of the responsibility to adhere to EPA Part 503 Biosolids Rules?

Response: It is the permittee's responsibility to communicate with the farms/landowners who participate in a land application program so that they are aware of their responsibilities. IDEM also provides a copy of the permit to all landowners identified in the permit application.

Comment: What is the difference between Identification of Potentially Affected Person versus Site Specific Addresses? There are 150+ site specific addresses attached to the permit. Has Mr. Daily notified all owners?

Response: Potentially affected persons are people Mr. Daily has identified as potentially affected by the issuance of a permit. The 150+ site specific addresses are those individuals Mr. Daily identified as potentially affected by the issuance of the permit or are adjoining landowners to a land application site. IC 13-15-8-2 states “not more than 10 working days after submitting an application for a permit issued under IC 13-15-1 or IC 13-7-10.1-1

(before its repeal), the person that submitted the application for the permit shall make a reasonable effort to provide notice: (1) to all owners of land that adjoins the land that is the subject of the permit application; or (2) if the owner of land that adjoins the land that is subject of the permit application does not occupy the land, to all occupants of the land; that the person has submitted the application for the permit.” The permit application packets contain an affidavit that all applicants are required to complete when their application contains site-specific land application site information. The applicant is required to complete the affidavit to indicate they are aware of the public notice requirements. Mr. Daily did complete the affidavit indicating he was aware of the public notice requirements.

Comment: How does Mr. Daily meet the criteria of a Hybrid permit?

Response: Biocycle has requested a hybrid land application permit which is a cross between a nonsite-specific and site-specific permit. To qualify for this permit, the heavy metal concentrations must meet the “Exceptional Quality” concentrations found in Table 3 of 327 IAC 6.1-4-9. This type of permit allows them to include both site-specific and nonsite-specific sites in their program. A nonsite-specific land application permit grants the applicant the ability to land apply on qualified farmland in a specified county or counties without first permitting the fields/application sites. They must also maintain a 660-foot setback from residences when applying to nonsite-specific sites at the time of land application. Nonsite-specific sites are not known to IDEM at the time of submittal of a permit application.

Comment: Where are the locations of sites in the affected counties besides Bartholomew, i.e. Decatur, Jackson, Jennings, Johnson, & Shelby?

Response: Biocycle wanted the option of land applying to other fields in the counties listed if farmers in those counties request the biosolids and/or industrial waste products. These are known as nonsite-specific sites. Once used, site information will be included with the monthly reports the first time the site is used after the effective date of the permit.

Comment: “Based on the size of the facility and permits - how many loads of material will be delivered each day? How many loads go in per day? How many loads go out per day? Does each truck that shows up get probed and tested? Does each truck leaving the facility with processed biosolids get tested?”

Response: The daily operation of Biocycle is not included in the permit application, IDEM does not ask how often trucks will be delivering biosolids or industrial waste products. Trucks delivering biosolids or industrial waste products to the structure will depend on storage capacity at the generating facility and at Biocycle’s structure.

Comment: Why do some Indiana landfills deny biosolid waste? What are the exact reasons that they deny them?

Response: 329 IAC 10-9-2 allows a municipal solid waste landfill to accept pollution control waste and biosolids. The reason a landfill would not accept biosolids is a decision of the landfill. In some cases, biosolids are not dry enough to provide a structural base

and therefore, landfills limit the amount they accept in a day. Weather conditions may also be a deciding factor as to when a landfill will accept sewage sludge or biosolids.

PERMIT APPLICATION ISSUES

Comment: The application fails to include signatures from the owners of the GC SWP, GC Pasture, GC West, GC NP and GC SP sites establishing that they have permission to land apply biosolids on their properties.

Response: The land use agreements for these sites were signed on April 22, 2024, and submitted by e-mail the same day. They were uploaded into IDEM's VFC on April 25, document number 83630266. It should be noted that the City of Columbus withdrew their approval for the sites in which they own to reserve them for land application under the City's permit.

Comment: The diagram included in Part 3 on the 4th page of Biocycle's application exhibits an unsophisticated, insufficient biosolids treatment and generation process. The instructions for Part III ask for a narrative description and lists several details to include at a minimum. Biocycle's application fails to provide any details about how the wastewater is treated. There is no description of how or where the biosolids will be generated or the type of wastewater treatment plants from which it intends to accept biosolids.

Response: Not all information within a permit application is relevant to all types of permit requests. In this case, Biocycle is not a wastewater treatment plant, they will not be treating wastewater to generate any biosolids, and therefore they do not have the types of structures indicated in Part III of the application. Biocycle is approved to accept only dewatered biosolids and upon IDEM approval dewatered industrial waste products and therefore they only have one storage structure for the storage of dewatered waste materials.

Comment: The application does not even state the height of the concrete blocks that purportedly will "section off" the blended biosolids ready for land application from the dewatered biosolids received from the municipalities.

Response: The information regarding the storage structure can be found in the Notification for the Construction of a Storage Structure for Biosolids/Industrial Waste Products or Pollutant-Bearing Water (state form 50405) and in IDEM's virtual file cabinet (VFC) under ID number [83575063](#) or the additional information file also in the VFC under ID number [83597445](#).

Comment: Indiana environmental regulations for biosolids storage facilities indicate that the biosolids are intended to be stored in tanks, but Biocycle's application indicates that the building or storage structure serves as the tank.

Response: Part III. Treatment & Generation Process Details page item (2) states the number, type and volume of all treatment and storage units (digesters, holding tanks, etc.) with emphasis on the etc, meaning other types of storage units. Part V. Storage Documentation page lists the various types of structures including drying beds,

dewatered storage pad, and others to be specified. Biocycle indicated a dewatered storage pad will be used for blending and storage of the waste products. IDEM recognizes that wastewater treatment plants process and store biosolids by various methods. State form 50410 (Permit Application for the Land Application of Biosolids) is designed to accommodate these various methods.

Comment: In Part IV, section B of the application, regarding vector attraction reduction, Option 10 “Incorporation within 6 hours” is selected. The form includes a note to the right of this section stating that if only Option 9 and/or 10 are selected, the applicant “cannot submit a management plan for surface application on frozen or snow-covered ground, or for stockpiling.” However, both Part IX “Frozen/Snow-Covered Ground Management Plan” and Part X “Stockpiling Management Plan” have been completed in this application. Biocycle LLC makes several references to biosolids in conjunction with frozen or snow-covered ground and stockpiles, despite the fact that the method selected in Part IV would prohibit both practices. This is of particular concern because it is unclear to us how Biocycle LLC intends to actually manage and apply the biosolids to the sites referenced in this permit application.

Response: This was addressed in the request for additional information for the application, in which Mr. Daily indicated that when applying to frozen or snow-covered ground or if the biosolids are to be stockpiled at the land application site, whomever he receives the biosolids from must provide documentation that their biosolids meet one of the eight vector attraction reduction methods. All biosolids stockpiled or surface applied to frozen or snow-covered ground must have proper documentation of vector attraction reduction.

Comment: Several comments were submitted regarding the permit application’s identification (or lack of identification) of wells either at the land application site or on nearby properties.

Response: 327 IAC 6.1-4-6 prohibits land application of biosolid or industrial waste product within 50 feet of any well and 200 feet if the well is potable. This applies to wells that may be located on land application sites or neighboring properties. This was addressed with Biocycle and the application was updated. It is the responsibility of the permittee to determine the location of all wells on or near the land application site or maintain a 200-foot setback from the property line. Failure to meet the setback requirements would be a violation of the permit and grounds for an enforcement action.

Comment: Several questions/comments were received about monitoring of wells on neighboring properties.

Response: IDEM’s land application regulations do not require testing private wells before or after permit issuance. 327 IAC 6,1 requires the applicant to maintain a 50-foot setback to any well and 200-foot setback if the well is potable when land applying to prevent contamination. If a homeowner chooses to monitor their well, it would be their responsibility.

Comment: The corporate address is NOT where the proposed facility will be located, which was NOT identified by the local media.

Response: The permit application asks for the mailing address for the applicant which in most cases is different from the physical location of the generating facility. The application also asks for the physical location of the facility, which was identified as “just south of 511 S 525 E”. IDEM has no control over articles published in local media. A map identifying the location of the generating facility is also required to be submitted and was included.

Comment: What would the biosolids be mixed with? Blended with?

Response: Biocycle’s permit allows them to blend various sources of biosolids with other biosolids, biosolids blended with Industrial waste products (upon approval by IDEM) and/or animal manure.

Comment: Is this a business or an agriculture site? The fact that Mr. Daily is using the facility as treatment, processing, and storage facility indicates this is a business.

Response: IDEM is not responsible for making this determination. It should be noted that Biocycle will not be treating biosolids. They are limited to receiving biosolids that already meet the specified quality within state and federal regulations for land application. This facility is required to blend two or more biosolids and/or industrial waste products and prepare them for land application.

Comment: DEGREE OF PUBLIC ACCESS section indicates the site DADS EAST meets the definition of “Land with low potential for public exposure”. There are homes, waterways, private wells North/South/East & West of this site. Who made this determination?

Response: 327 IAC 6.1-2-35 defines “Land with a low potential for public exposure” as land that has restricted access; is inaccessible to the public; or is not used by the public during normal work or recreational activities. Some examples of these include but are not limited to the following: agricultural land that is not used for growing food crops or open to the public (such as strawberry or pumpkin patches) for any period of time. These fields do meet the criteria for land with a low potential for public exposure because they are privately owned and not open to the public.

Comment: SITE FEATURES indicates the area of the site is within 33 ft of surface water or the surface conduit to a subsurface feature. And the area of the site is within 300 ft of surface waters or the surface conduit to a subsurface feature. And the area of the site is within 300 ft of a residence. Harold Daily resides at 511 S 525 E. Why is the application even considered if the site of land application and the processing/storage facility is anywhere near a residence, waterways & aquifers?

Response: The Site Information Form asks if the land application site contains these features or if they are nearby as information for the permittee and IDEM staff. 327 IAC 6.1-4-5, 5.5, and 6 list the various setback distances required based on the type of permit

and method of land application (surface application, injection, or incorporation). IDEM does not deny use of a site when there are wells, surface waters or a conduit to a subsurface feature, residences, or public places are within the proximity of the site. Identifying these features indicates the permittee will be required to maintain the required setbacks. It should be noted that the land application regulation allows for reduced setbacks to residences of the landowner of the land application site and when a waiver has been obtained from the neighboring residence owner and, if applicable, tenant.

Comment: How does IDEM inspect wells and WWTP, what is the process? Is this a weekly/monthly/annual process? Is IDEM responsible for the condition of the wells and WWTP? Is IDEM responsible for notifying citizens of the county when levels of pathogens, PFAS exceed the guidelines?

Response: WWTPs and wells are beyond the scope of this land application permit action. As a general response, staff of IDEM's OWQ perform routine inspections of the wastewater treatment plants on a routine basis based on the size of the wastewater treatment plant. Public water supply wells and/or treatment systems are also inspected by OWQ staff. IDEM is not responsible for the condition of the wells or wastewater treatment plants. It is the responsibility of the permittee to ensure that the requirements of all applicable permits are met.

The IDEM's OWQ website (link: [IDEM: Water Quality In Indiana: Water Quality in Indiana Home](#)) contains various information regarding their sampling schedules, monitoring results, and advisories. In regard to biosolids/industrial waste products, IDEM does not notify citizens of the county when the quality does not meet the required limits because the specific waste product is not permitted for land application. It should also be noted that there are currently no limits on PFAS concentrations in biosolids or industrial waste products or for land application in general.

Comment: USA Today July 12, 2000, CDC sounds warning on risks of sludge. Report concludes that sewage sludge that has been converted to fertilizer can pose potential health risk from E. coli, salmonella, hepatitis B and other bacteria and viruses. CDC recommends all sludge be cleaned to Class A standards. Is IDEM following CDC recommendations?

Response: The CDC does not set the standards for land application of biosolids. IDEM does not require all biosolids to meet Class A standards as the EPA allows for the land application of Class B material. Land application of Class B biosolids have increased restrictions such as set-back requirements, harvesting restrictions, and prohibit public contact with sites where Class B biosolids have been applied to prevent potential health risks.

Comment: Applicant states in Site Use History section that Columbus City of Utilities applied biosolids in the past on DADS EAST. Was there a permit required at the time of application? Why weren't we notified of the land application at that time? Why is Mr. Daily required to notify landowners now? What has changed?

Response: The City of Columbus has had an existing Nonsite-Specific land application permit since August of 2013. The DADS EAST site was used by Columbus City Utilities on a few separate occasions during 2014. When the DADS EAST site was added to the City of Columbus permit, the site was added as a nonsite-specific site, which did not require them to notify adjoining property owners. Because Biocycle, LLC has opted to include the DADS EAST site as a site-specific site in their permit, they are required to notify the adjoining property owners for the site.

Comment: Another concern mentioned was the accumulation of metals and nutrients on a land application site, and the runoff potential of contaminants from a site.

Response: 327 IAC 6.1 requires all facilities that land apply to track heavy metal (pollutant) loading to all sites used for land application as well as the annual nutrient loading applied for each crop. The cumulative pollutant loading limit ultimately determines the total amount of biosolids and industrial waste products that can be applied on the application site. State and federal regulations both contain annual and cumulative pollutant loading limits for eight of the heavy metal concentrations listed in the regulations. When the cumulative limit for any pollutant is reached, no additional land application can occur on a site. Annual pollutant loading limits are, in part, designed to provide at least a twenty-year site life before these cumulative limits are reached. However, due to pretreatment requirements and better treatment systems, heavy metal concentrations in biosolids have significantly decreased in the past 30 years, thus extending the life of a land application site.

Because heavy metal concentrations have decreased, in most cases the limiting factor for land application is the nutrient content in biosolids and industrial waste products. Land application of nitrogen is based on the amount of nitrogen in the biosolids or industrial waste products and the crop to be grown on the land application site. Nutrient application rates range from 50 pounds of plant available nitrogen (PAN) per acre per year (for grass or no crop grown) to 200 pounds of PAN per acre per year when corn is the projected crop. The permittee/certified operator equivalent must work with the farmers to determine the projected crop and to make sure the appropriate crops are planted.

The nitrogen in biosolids and industrial waste products is typically slow releasing, which means more of the nitrogen is available as crops grow. This slow release of nitrogen prevents excess build-up in the soil reducing the potential for run-off and leaching into ground water.

Comment: When you say that you use projected crop grown to build your nitrogen plan per Purdue sources, soybeans make 100% of their own nitrogen source. So, does that mean no human waste will be spread before planting a soybean crop? Are they only going to spread acres going into corn that year? Is soil type a consideration when determining application rates.

Response: The regulation allows an application rate of up to 100 pounds of PAN per acre per year when soybeans are the projected crop. Land applying biosolids has been documented by various researchers to improve soils. Biosolids add nutrients and organic matter to sandy soils and helps to increase the moisture holding capacity.

Comment: How is it that animal manure, cow, pig, turkey, chicken regulated by other nutrient levels like phosphorus, but human waste is not? When you are only considering nitrogen, other nutrient levels will become in excess and lead to nutrient toxicity and high nutrient leaching.

Response: State and federal regulations do not require applying biosolids or industrial waste products based on the phosphorus requirements of the crop or the cumulative amount in the soil.

Comment: The USDA does not allow biosolids to be applied on any produce to be labeled as organic.

Response: Yes, that is a true statement. 327 IAC 6.1 also does not allow the land application of Class B biosolids on fields where produce (tomatoes, sweet corn, strawberries, etc.) are grown due to the potential for pathogens.

Comment: Will our vegetable garden's be compromised?

Response: When biosolids and/or industrial waste products are applied in compliance with the permit and land application regulations, the biosolids and/or industrial waste products and potential contaminants should not migrate from the land application site and should not have any impact on neighboring properties.

Comment: When did the 10-day notification clock begin? Date of application or date of submission?

Response: Date of submission of the application to IDEM.

Comments were received asking how neighbors will be informed that biosolid land application is taking place nearby.

Response: Indiana Code 13-15-8 requires the applicant to provide notice to adjoining property owners when an application for a permit is submitted to IDEM. Neither the Indiana Code nor IDEM regulations require the permittee to provide notice to adjoining property owners or nearby residents as to when land application will occur on a specific field.

Comment: Who from IDEM will be on site to ensure "appropriate" spreading rates and ensure compliance with regulations. Biocycle claims it will apply the biosolids at the IDEM agronomic rate for the next crop to be grown by the proper testing of biosolids, but it fails to describe who will be conducting such testing and when and where such testing will be conducted.

Response: IDEM Staff are not on-site during land application. Biocycle is required to abide by the conditions of their land application permit and the regulation. They are required to conduct sampling, review results, and determine appropriate application rates. Application rates are based on the nutrient content of the biosolids and/or industrial waste products and the crop to be grown in the next growing season. A land application

program typically includes a variety of land application sites (fields) so that land application can occur at different times of the year. Corn, soybeans, and winter wheat allow for land application at different times of the year. Soybeans can be planted later into the season and winter wheat comes off late spring early summer. Having multiple fields and planting different crops in those fields allow land application at different times of the year without shortening the growing season.

To determine compliance, all land application permits require a report to be submitted thirty days following the end of each month. These reports must indicate if land application activity occurred or state no land application for the month and include a report of all incoming sources. When land application occurs analytical data of the biosolids and/or industrial waste products land applied, the site that was used for land application, the amount applied, and other information as indicated in the permit are required to be reported.

All land application activity, sampling, completing and submitting the monthly reports, and activities at the storage structure must be conducted under the supervision of the permittee or certified operator equivalent. While it is always possible to falsify reporting data for any self-monitoring and reporting program, substantial penalties can be levied against a permittee for such infractions.

Comment: If approved will the permit need to be presented to any local government officials for approval?

Response: IDEM does not require entities that obtain a land application permit to also obtain local approval. If the local government requires local approval, Biocycle will need to follow any local, federal, or state laws pertaining to the activities they conduct.

Comment: Residents of the Orchard subdivision received notice from their homeowner's association that biosolids are planned to be land applied to fields near the subdivision. The comments were that they do not approve or support land application on fields near their homes.

Response: The specific sites were not identified; however, it appears the sites in question are GC NP, GC NW, GC PASTURE, GC SP, GC SWP, and GC WEST. As previously mentioned IDEM cannot deny the permit application or use of land application sites based on public comment. Sites can only be denied if their features don't meet the criteria of 327 IAC 6.1. It should also be noted that these fields have been used as land application sites for the City of Columbus since the 1990s.

COMMENTS REGARDING THE STORAGE STRUCTURE

Comment: How often does IDEM inspect/evaluate storage facilities in their program? Can you include a detailed report of what you inspect at the other 7 facilities and how often? Examples: Concrete floors, runoff, storage tanks, etc. How can the public access reports.

Response: IDEM, Office of Land Quality's Confined Feeding Operations (CFO) Compliance staff inspect storage structures for the land application program on a routine basis at least once every two years. Structures are inspected based on the type of structure (tank, lagoon, pad, earthen, concrete, etc.) and the requirement of 327 IAC 6.1-8-7 Operational requirements for storage structures. The inspections include looking for structural failures such as cracks and signs of biosolids or industrial waste products leaving the structure. Inspection reports are uploaded to IDEM's VFC after supervisor's approval of the reports.

Comment: Concerns about the current state of the property and how there is an old building in disrepair.

Response: While the old building may be unsightly, it is outside of the scope of 327 IAC 6.1. As previously mentioned IDEM CFO Compliance staff will routinely inspect the storage structure and require repairs as needed. If repairs are needed, IDEM's inspector will typically give a specified time frame for the repairs to occur and will conduct a follow-up inspection to confirm the repairs are completed as required. Failure to maintain the structure can be grounds for enforcement action. If Biocycle ceases to use the storage structure, 327 IAC 6.1-8-8 requires the contents of the structure be properly disposed and the structure dismantled. IDEM's inspector will conduct an inspection to confirm the biosolids and/or industrial waste products have been removed, properly disposed, and the structure dismantled and removed. Failure to follow the closure requirements are also grounds for enforcement action.

Comment: Does IDEM's responsibility end after approval? What follow up steps are required?

Response: Biocycle is required to submit a monthly report that includes the volume and source of biosolids and industrial waste products received that month. They are also required to report land application activity including the volume applied, each site used, and submit all required analytical data. IDEM's responsibility includes the previously mentioned inspections of the structure. IDEM also investigates citizen's complaints.

Comments: What is the depth of the bedrock surrounding this facility?

Response: IDEM's Geology staff reviewed the site and determined the bedrock is no less than 40 feet below the soil surface. 327 IAC 6.1-8-5 Performance and construction standards for storage structures for dewatered biosolids and industrial waste products, do not require specific space between the bottom of the structure and bedrock or the water table. If there was such a requirement IDEM uses the USDA Natural Resource Conservation Service's data to determine the depth to bedrock and the water table. The applicant can also choose to have a soil scientist do an on-site evaluation and submit a site-specific report detailing the depth of these features. 327 IAC 6.1-8-7 Operational requirements for storage structures require the facility be maintained to prevent discharge or seepage from the structure.

Comment: “Biocycle’s storage facility will not prevent runoff from biosolids or ensure that the biosolids will be collected in a fixed volume. Biocycle claims that the interlocking concrete blocks will prevent biosolids from being added or removed, but that merely separates the piles of biosolids, not the samples. The interlocked blocks are insufficient to maintain the biosolids samples separate from the dewatered biosolids received from municipalities. The samples will regularly be compromised. Because the biosolids do not meet the definition of a “fixed volume,” Biocycle should be required to comply with nutrient sampling method option 1 – composite sample collected during and analyzed following, land application. Also, Biocycle does not have a backup option for disposing of the biosolids if testing samples exceed pollutant limits as required under 327 IAC 6.1-4-9.”

Response: IDEM Engineering staff determined the design of the structure is adequate to contain the contents and prevent liquids from leaving the structure through runoff or seeping through cracks. Biocycle’s application to construct and operate the storage structure included a proposal to install a drain system and underground tank to collect any potential runoff. The tank will be routinely checked and emptied as needed. Disposal of the liquid will be either by land application or hauled to a wastewater treatment facility.

A fixed volume means the amount of biosolids or industrial waste products (or blends containing both) prepared for land application where the volume does not change by either adding to or removing any of the biosolids or industrial waste products between the time of sampling and land application. An example is a stockpile of dewatered biosolids. Dividing the storage structure into sections allows biosolids and/or industrial waste products to be separated to create the fixed volume. In the event they are not able to separate materials, they would have to stop accepting biosolids or industrial waste products from the time the samples are collected until they finish land applying the volume within the structure.

If biosolids and/or industrial waste products fail to meet the criteria for land application, Biocycle is required to dispose of the waste by an alternate method, such as sending it to a landfill. Alternate methods of disposal are not required to be identified.

Comments: Can IDEM deny the processing/storage facility but approve the land application? Why is there a land application and structure permit combination? Can one be approved without the other?

Response: No, IDEM cannot deny one application and approve the other (storage structure application or land application permit application). A land application permit is issued to the generator of the material, the storage structure is required for Biocycle to be able to blend the material and become the generator. Therefore, they need both a Land Application Permit and a storage structure to meet the criteria in 327 IAC 6.1.

Comments: The proposed facility is located less than 100 feet from a neighboring farm, residences within 1 mile, 3 miles from schools. Who confirms/monitors the various required setbacks for this facility. Biocycle did not provide enough information for IDEM to review and make an adequate determination regarding the site location and stormwater management. Lack of notification to adjoining property owners.

Response: A person may notify IDEM of their intent to construct and operate a storage structure provided their proposal complies with the standards found at 327 IAC 6.1-8. To qualify to construct and operate a storage structure under a notification program, the structure must be no less than 1,000 feet from a residence or public building, 300 feet from any surface waters or the surface conduit to a subsurface feature, 200 feet of any well, and not in a flood plain. IDEM Engineering and Permit staff both reviewed Biocycle's application to construct and operate a storage structure and found the location and design of the structure to meet the requirements of 327 IAC 6.1-8-3 (setbacks) and 6.1-8-5 (performance and construction standard). IDEM does not approve or issue a permit for a storage structure that is submitted under the notification portion of the regulation. Because IDEM does not issue a permit for storage structures under the notification program, it is our understanding that the public notice requirements in IC 13-15 do not apply. Biocycle submitted an application to construct and operate a storage structure under the notification program and therefore was not required to notify adjoining property owners.

Review of the notification found the location of the storage structure does not reside within a flood plain, and the slope of the soil surface in the area of the structure is not greater than 2%. The storage structure will be constructed of a concrete base and concrete walls on three sides with water stops, which will prevent seepage into the groundwater or flow of water outside of the building. A roof will be installed, and the entrance to the storage structure will be built to prevent run-on (water outside of the structure from flowing into the structure) from contacting the biosolids and/or industrial waste products stored in the structure. The open side of the storage structure will have an installed trench drain leading to a holding tank. This will collect any contaminated moisture leaving the structure and direct it to a storage tank for proper disposal. Based on the proposed design and operational requirement in 327 IAC 6.1-8-7, there should be no discharge of contaminants from the storage structure.

Comments were submitted regarding the applicant's notification of adjoining property owners.

Response: Indiana Code IC 13-15-8 requires that permit applicants notify adjoining property owners of the submission of certain types of applications to the state. When providing notice to adjoining property owners, an applicant is only required to provide a written notice that includes the date the permit application was submitted to IDEM, and a brief description of the subject of the application. To verify that the applicant is aware of this requirement, the application packet provided to applicants desiring a land application permit includes an "Affidavit of Public Notice" form. This form is the only information the applicant is required to submit to IDEM that indicates the adjoining property owners were notified of application submittal. An "Affidavit of Public Notice" form was submitted to IDEM with the original permit application documents. IDEM also publishes a notice when a permit application is received on our website: <https://www.in.gov/idem/public-notices/>.

Comments were received regarding zoning of the proposed storage structure.

Response: Zoning is not within the regulatory scope of 327 IAC 6.1, and therefore is not addressed in the permit. This regulation does not require an applicant to demonstrate

that they have obtained other applicable permits or approvals. Permits issued under 327 IAC 6.1 are based on the information contained in the permit application and compliance with that regulation only. Zoning concerns should be addressed with the local authorities.

SUITABLE LOCATION

Several **comments** were submitted regarding the location of the storage structure and that Biocycle should find a different location.

Response: IDEM plays no role in a facility's disposal methods, selecting the location of facilities that handle biosolids and/or industrial waste products, or the location of sites used for land application. It is IDEM's responsibility to review the acceptability of waste handling facilities and land application sites that are proposed by an applicant but is never involved in site selection. So long as the permit application meets the requirements of IDEM's regulations, IDEM does not have the authority to suggest an applicant/permittee find a different location to construct and operate a storage structure or where to land apply their biosolids and/or industrial waste products.

Comment: Is the applicant permitted to store delivered biosolids indefinitely or are there regulations supporting disposal in a timely manner?

Response: They must not store a fixed volume of biosolids and/or industrial waste products for land application in a storage structure for more than two years. This means that if Biocycle stops taking in biosolids and industrial waste products, the blended material within the storage structure can only be stored for two years.

Comment: State form 50405 titled "Notification for the Construction of a Storage Structure for Biosolids/Industrial Waste Product or Pollutant-Bearing Water" and I emphasis "POLLUTANT-BEARING" water indicates our farm and residences may be affected with some type of pollutants whether it be water run-off or air quality. Is this a fact?

Response: Pollutant-bearing water was a term used to identify treated domestic wastewater, industrial process wastewater, and industrial storm water. When the regulation was being written back in the 1990s, the Indiana State Legislature defined wastewater as the waste removed from a residential septic system. So as not to confuse the definitions, IDEM staff had to use a different term and they came up with the term pollutant-bearing water. State form 50405 titled "Notification for the Construction of a Storage Structure for Biosolids/Industrial Waste Product **OR** Pollutant-Bearing Water" is a form used to provide notification of construction of a storage structure for any of the following: Liquid biosolids, dewatered biosolids, liquid industrial waste products, dewatered industrial waste products, OR pollutant-bearing water. The applicant submitted notification for a storage structure to hold dewatered biosolids and industrial waste products.



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

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(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Eric J. Holcomb
Governor

Brian C. Rockensuess
Commissioner

July 16, 2024

VIA E-MAIL: edaily17@gmail.com

Biocycle, LLC

Attn: Mr. Evan Daily

3788 East 300 South

Columbus, Indiana 47201

Re: Storage Structure Notification
Covered Concrete Pad with Sidewalls
Range 06E, Township 09N, Section 25
Clay Township, Bartholomew County
Storage Structure ID No. 010915

Dear Mr. Daily:

Your notification to construct and operate a dewatered storage structure at the referenced location was received on December 21, 2023 (VFC# 83575063) with additional information being received on February 9, 2024 (VFC# 83597445). This notification describes the structure as an 85-foot wide by 100-foot long concrete pad with concrete walls on three sides. The structure will have a roof to prevent the contents from contacting rain or other precipitation. The pad will have an approximate capacity of 40,000 cubic feet and will be used for the storage of biosolids and industrial waste products that will be land applied under the authority of Land Application Permit No. IN LA 000915. This letter is to acknowledge that your notification and additional information complies with 327 IAC 6.1-8. Any changes to the design or construction of the proposed structure requires submittal of a revised notification.

Public records for your facility are available in IDEM's Virtual File Cabinet at <http://vfc.idem.in.gov/>. Your documents can be found by selecting the "Solid Waste Program ID" in the "Quick Search" field (in the upper right-hand corner of the page) then enter your permit number, 000915.

If you have any questions concerning this matter, please feel free to contact me at (317) 233-0472 or bstephan@idem.in.gov.

Sincerely,

Brenda Stephanoff, Senior Environmental Manager
Solid Waste Permits Section
Office of Land Quality



Visit on.IN.gov/survey or scan the QR code to provide feedback.

We appreciate your input!



Jeff McGuire
Page 2

cc: Bartholomew County Health Department

From: Poe, Diane L
To: ["edaily17@gmail.com"](mailto:edaily17@gmail.com)
Cc: ["ifulp@bartholomew.in.gov"](mailto:ifulp@bartholomew.in.gov); ["environmental@decaturcounty.in.gov"](mailto:environmental@decaturcounty.in.gov); ["khubbard@jacksoncounty.in.gov"](mailto:khubbard@jacksoncounty.in.gov); ["pramsey@jacksoncounty.in.gov"](mailto:pramsey@jacksoncounty.in.gov); ["kpearson@jenningscounty-in.gov"](mailto:kpearson@jenningscounty-in.gov); ["eswearingen@co.johnson.in.us"](mailto:eswearingen@co.johnson.in.us); ["shelby_health@hotmail.com"](mailto:shelby_health@hotmail.com); ["jbergman@columbus.in.gov"](mailto:jbergman@columbus.in.gov); ["areaplantdirector@decaturcounty.in.gov"](mailto:areaplantdirector@decaturcounty.in.gov); ["cbarnette@jacksoncounty.in.gov"](mailto:cbarnette@jacksoncounty.in.gov); ["apc@jenningscounty-in.gov"](mailto:apc@jenningscounty-in.gov); ["planning@co.johnson.in.us"](mailto:planning@co.johnson.in.us); ["awalterman@co.shelby.in.us"](mailto:awalterman@co.shelby.in.us); heather.siesel@bartholomew.in.gov; solidwaste@decaturcounty.in.gov; ["debbiehackman@aol.com"](mailto:debbiehackman@aol.com); ["aaron@seird.org"](mailto:aaron@seird.org); ["jessiebiggerman@jcrd.org"](mailto:jessiebiggerman@jcrd.org); Lisa Carpenter; ["commissioners@bartholomew.in.gov"](mailto:commissioners@bartholomew.in.gov)
Bcc: [Wolff, Brian](#); [Feller, Robin](#); [Kurylo, Leo](#); [Kreke, Thomas](#); [STEPHANOFF, BRENDA](#); [Stettler, Cornelia](#); [Amick, Mark](#); [Bingman, Susanna](#); [Werstler, Brooke](#)
Subject: Biocycle LLC, Land Application Permit Approval
Date: Tuesday, July 16, 2024 8:44:00 AM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.png](#)
[071624 000915 FinalPN - notice of decision Mailing.pdf](#)

Attached is correspondence regarding the above property affecting Bartholomew, Decatur, Jackson, Jennings, Johnson, and Shelby Counties. A hardcopy **will not** be sent to the addressee.

In this attachment, you will find the Notice of Decision, Response to Comments, Storage Structure Approval, Permit Approval, and Appeals Procedures.

If you have any questions, please contact Ms. Stephanoff. Her contact information is in the last paragraph of the letter.



Indiana Department of
Environmental Management
Diane Poe
OLQ Permits Branch Administrative Assistant
• (317) 232-4473 • dpoe@idem.IN.gov

Protecting Hoosiers and Our Environment



www.idem.IN.gov

From: [Microsoft Outlook](#)
To: edaily17@gmail.com
Subject: Relayed: Biocycle LLC, Land Application Permit Approval
Date: Tuesday, July 16, 2024 8:44:34 AM
Attachments: [Biocycle LLC Land Application Permit Approval.msg](#)

Delivery to these recipients or groups is complete, but no delivery notification was sent by the destination server:
edaily17@gmail.com (edaily17@gmail.com) <mailto:edaily17@gmail.com>
Subject: Biocycle LLC, Land Application Permit Approval