



**Department of
Environmental
Conservation**

DEC Regulation of Food Processing Waste Use in Ag

Sally Rowland, Ph.D., P.E.

Molly Trembley, P.E.

NYSDEC, Division of Materials Management

IMPORTANT NOTE:

We are discussing DEC solid waste requirements,
NOT SPDES requirements.

Check out our Organics Management for Farms page:
<https://dec.ny.gov/environmental-protection/recycling-composting/organic-materials-management/farms#whey>



Cheese Residuals – Potential Reduction and Recycling Options

- Co-products
- Food donation
- Animal feed
- Land application in agriculture
- Anaerobic digestion
- Other



Coproducts

- Animal feeds
- Fermentation media
- Beverage ingredient
- Whey protein powders, etc.

Existing research:

DEC has provided \$500k+ to the food science group at Cornell to investigate alternative food products

To right: Professor Sam Alcaine showing off *Norwhey*, an alcoholic seltzer product created from acid whey

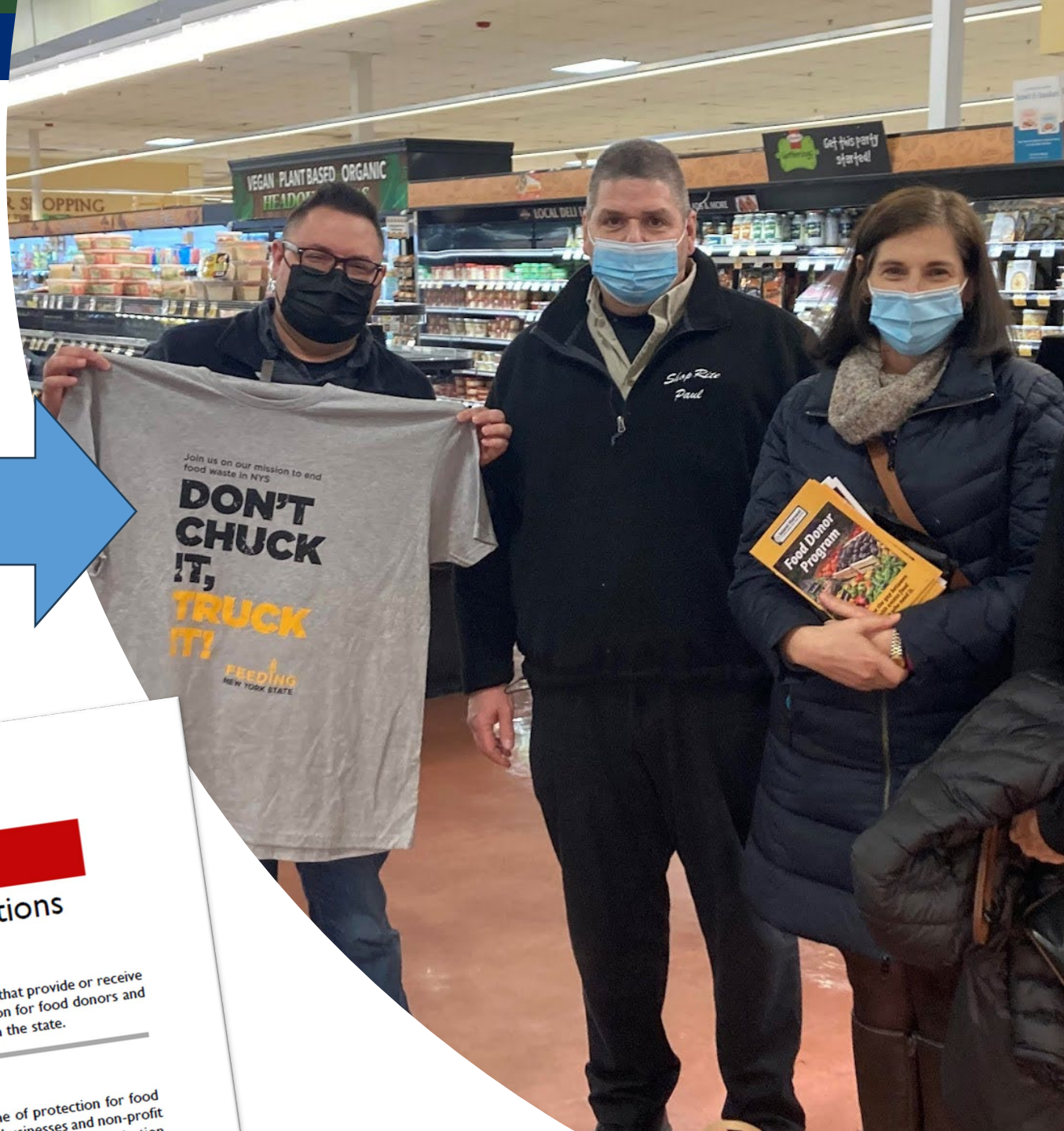


Food Donation

DEC Partner Feeding NYS

Call Center – (518) 930-7000

- Setting up a donation program
- Finding a food bank or local food rescue organization to partner with
- Understanding food safety practices when donating



Legal Fact Sheet

New York Food Donation: Liability Protections

Created by the Harvard Food Law and Policy Clinic, September 2018

Federal and state laws provide strong liability protections for businesses (including farms) and nonprofits that provide or receive donated food. The federal Bill Emerson Good Samaritan Food Donation Act provides liability protection for food donors and recipients, and New York's Good Samaritan law provides additional liability protection to businesses in the state.

...the federal baseline of protection for food ... businesses and non-profit ...

Animal Feed

Part 360 Beneficial Use Determination ([BUD](#)) required (360.12)
Existing BUDs have been approved for *cheese and yogurt whey*



[OpenData](#) lists all
existing BUDs
across NYS

The screenshot shows the DATA.NY.GOV website interface. The browser address bar displays the URL: <https://data.ny.gov/Energy-Environment/Case-Specific-Beneficial-Use-Determinations-Beginn/id6x-s>. The website header includes the New York State logo and navigation links for Services, News, and Government. Below the header, the main content area displays a table of BUDs. The table has four columns: BUD Number, BUD Grantee, Solid Waste, and Beneficial Use. The table is currently in a list view, and there are options to 'Back to Primer' and 'Switch to Grid View'. The table contains several rows of data, including entries for GM Powertrain Group, Concrete Recycling Corp., Dave Osborn's Family Fun Park, and International Paper Company.

T BUD Number <i>bud_number</i>	T BUD Grantee <i>bud_grantee</i>	T Solid Waste <i>solid_waste</i>	T Beneficial Use <i>beneficial_use</i>
005-6-45	GM Powertrain Group	Foundry Sand	Aggregate (Concrete, Asphalt)
009-9-15	Concrete Recycling Corp.	Concrete	Aggregate (Concrete)
009-9-15	Concrete Recycling Corp.	Concrete	Base (Sub)
010-4-20	Dave Osborn's Family Fun Park	Tire (Chips)	Base (Road)
014-5-46	International Paper Company, Hudson Rive...	Sludge (Papermill)	Growth Medium
014-5-46	International Paper Company, Hudson Rive...	Sludge (Papermill)	Mulch
014-5-46	International Paper Company, Hudson Rive...	Sludge (Papermill)	Soil Amendment
017-5-57	Encore Paper Co./James River Corp.	Sludge (Papermill)	Landfill Closure Grading and Cover
017-5-57	Encore Paper Co./James River Corp.	Sludge (Papermill)	Landfill Daily Cover

Dairy Byproduct BUDs

Examples of active or previously granted BUDs:

Animal Feed

- Insight Dairy
- H.P. Hood
- Johnstown Renewables
- Baskin Livestock
- North Country Dairy
- Chobani
- Upstate Farms Cultured Products



Fertilizer

- H.P. Hood (treated milk wastes)



BUD Petition

- Description of material
- Quantity of material
- Description of how material is collected and stored at the processor
- List of methods to control contamination in material
- Depackaging details (if applicable)
- Nutritional info (not req'd if another BUD has been issued)
- List of farms that will accept material
- Description of how farms will store the material and control odor, spoilage, runoff, etc.

Division of Materials Management

Beneficial Use Determination Petition – Animal Feed

OFFICIAL USE ONLY

DATE RECEIVED: _____

PROJECT NUMBER: _____

STAFF INITIALS: _____

DATE: _____

6 NYCRR Part 360.12(c) addresses 29 pre-determined materials which, when used in the manner noted in that subdivision, are not considered solid wastes (for the purposes of Part 360). In situations where a proposed reuse is not specifically identified in that subdivision, material generators and potential users may petition the Department for a case-specific beneficial use determination (BUD) under Part 360.12(d). This form has been developed to assist applicants in obtaining a case-specific BUD for the use of excess food scraps and food processing wastes as animal feed. This application **IS NOT** needed for the use of bread and other similar grain products (e.g., spent brewery grains, bakery waste, etc.) used for animal feed, as these materials are listed as a pre-determined beneficial use under Part 360.12(c)(2)(vi).

Note: This form is intended to address the requirements of 6 NYCRR 360.12(d) and does not cover all animal feed regulations and requirements that are administered by other local, state, or federal regulating agencies.

Petitioner Information

Full Name: _____
Last First M.I.

Affiliation: _____
Company Title

Primary Address: _____
Street Address City/Town

County: _____ Zip Code: _____

Primary Phone: (____) _____ **Primary Email:** _____

Food Scraps or Processing Waste Information

Duration of Use: _____ (up to 5 years)

Food Waste Material: _____
Type of Food Material (e.g., wasted produce, whey, etc.) Estimated Quantity (i.e. tons/year)

Source of Generation: _____
Generator Name Facility Type (e.g., Food Processor, etc.)

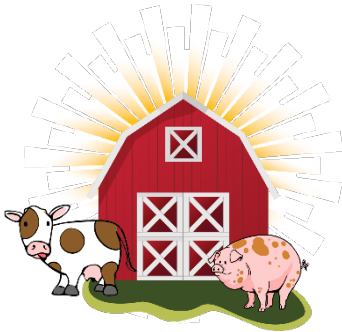
Generator Location(s) (Address, Town, County): _____

Description of Waste Material: _____

Revised 11/30/2021 Page 1 of 5

Land Application (6 NYCRR Part 361-2)

CAFO Farm



Exempt if:

- Directly land applying (no storage)

OR if:

- Storage structure is NRCS NY313 complaint
- No sanitary/industrial waste
- Not located on Long Island or NYC watershed
- FPW \leq 50% by volume annually

Non-CAFO Farm/Site



Registration if:

- Non-manure \leq 10% in storage by volume annually w/no liner cert.
- Non-manure \leq 40% in storage by volume annually w/NRCS NY313 cert.
- No sanitary waste

OR if material is directly land applied:

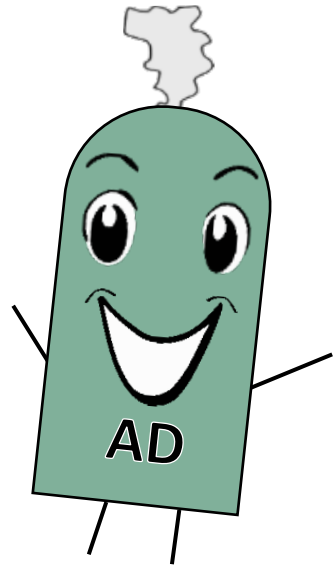
- Must analyze waste and apply at agronomic rates
- Site criteria in 361-2.5(b) (e.g., slope, etc.)
- Land app in NYC watershed or Long Island must be addressed in CNMP
- Temporary field storage allowed w/site criteria
- Odor management plan

Check out our guidance for food processing waste at a farm:

https://extapps.dec.ny.gov/docs/water_pdf/360flowchart.pdf



Department of
Environmental
Conservation



Anaerobic Digestion of Whey and Dairy Byproducts

CAFO Farm



Exempt if:

- FPW \leq 50% by volume annually
- Physical contaminant limits

Registration if:

- Does not qualify for exemption
- Enclosed storage for FPW
- See site criteria in 361-3.3(c)

Non-CAFO Farm



Exempt if:

- \leq 1,000 lbs or 1 cy per week (mo. avg)

Registration if:

- $<$ 50 tons per day
- Enclosed storage for FPW
- See site criteria in 361-3.3(c)

Permit required if it doesn't qualify for exemption or registration (e.g., $>$ 50 tons per day)

Check out our guidance for food processing waste at a farm:
https://extapps.dec.ny.gov/docs/water_pdf/360flowchart.pdf



Department of
Environmental
Conservation

How to apply for a registration

DEC Regional Office – Materials Management Supervisor

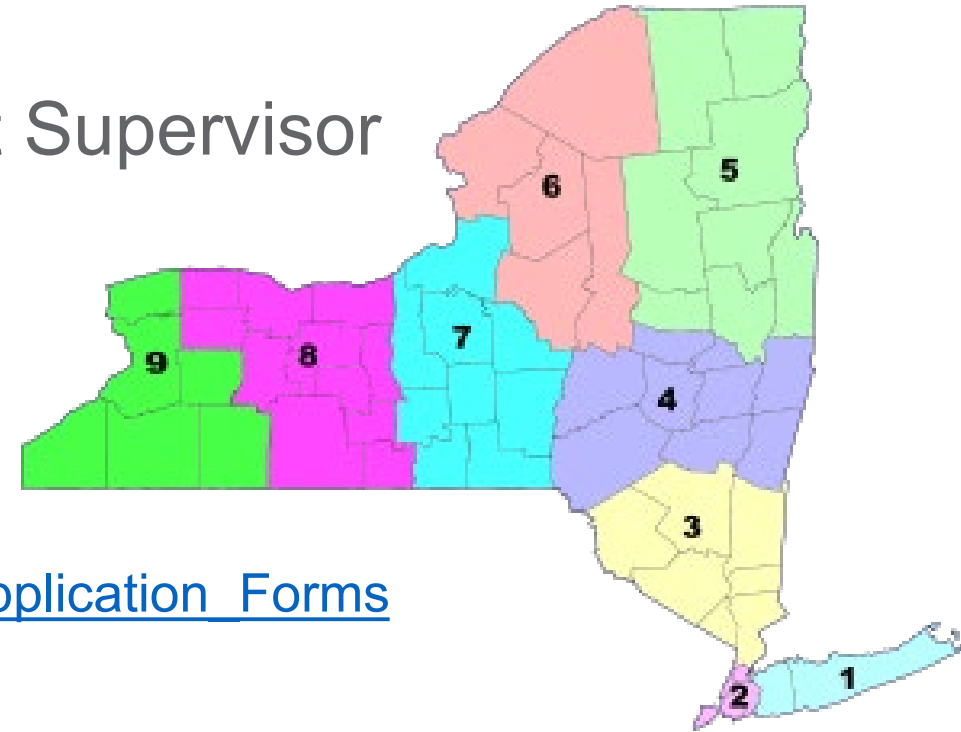
Find contacts here: <https://www.dec.ny.gov/chemical/76718.html>

Completed registration form and supporting information submitted to DEC regional office

Find forms here: https://www.dec.ny.gov/chemical/52706.html#Application_Forms

Valid for 5 years; no application fee

See Part 360.15 for additional conditions concerning registrations



Registration Form



DIVISION OF MATERIALS MANAGEMENT

DEPARTMENT USE ONLY	
DEC ACTIVITY #	
DATE VALIDATED	
EXPIRATION DATE	

REGISTRATION FORM FOR A SOLID WASTE MANAGEMENT FACILITY

Please read attached instructions (found at the end of this document) before completing this application. This is not a UPA permit. Solid waste management facility operations are not authorized until a registration is validated by the Department. Attach all required information to this form, as described in the instructions.

1. REQUEST TYPE (check applicable box)			
<input type="checkbox"/> Initial (new facility) <input type="checkbox"/> Renewal <input type="checkbox"/> Modification			
2. FACILITY INFORMATION			
Facility Name		Facility Address	
City/Town	Zip Code	Phone	DEC Region
NYTM – E Coordinate	NYTM-N Coordinate	DEC Activity Number (for renewal or modification only)	
3. FACILITY OWNER			
Owner Name		Owner Address	
City/Town/State/Zip Code	Owner Phone	Owner Email	
4. FACILITY OPERATOR			
Operator Name		Operator Address	
<input type="checkbox"/> same as facility owner			
City/Town/State/Zip Code	Operator Phone	Operator Email	
5. SITE OWNER			
Site Owner Name		Site Owner Address	
<input type="checkbox"/> same as facility owner			
City/Town/State/Zip Code	Site Owner Phone	Site Owner Email	
6. PREFERRED CONTACT			
<input type="checkbox"/> Facility Owner <input type="checkbox"/> Site Owner <input type="checkbox"/> Facility Operator <input type="checkbox"/> Other (provide):			
7. FACILITY OPERATING DAYS/HOURS			
8. SERVICE AREA			
9. SOLID WASTE RECEIVED			
Material	Maximum Throughput		
	Quantity	Units	Frequency (day/month/week/year)
1.			
2.			
3.			
4.			
10. MATERIAL STORAGE & TOTAL STORAGE CAPACITY			

11. REGISTRATION TYPE * Indicates Addendum required – see instructions for additional details		
Facility Type (check all applicable)		
<input type="checkbox"/> Research, Development, and Demonstration Project [360.18(a)]	<input type="checkbox"/> Waste Tire Collection and Storage [361-6.3(a)(1)]	
<input type="checkbox"/> Recyclables Handling and Recovery ≤ 5 tons/day [361-1.3(a)(1)]	<input type="checkbox"/> Waste Tire Sellers [361-6.3(a)(2)]	
<input type="checkbox"/> Recyclables Handling and Recovery > 5 tons/day [361-1.3(a)(2)]	<input type="checkbox"/> Waste Tire Retreaders [361-6.3(a)(3)]	
<input type="checkbox"/> Land Application and Associated Storage – Storage of Recognizable Food Processing Waste [361-2.3(a)] *	<input type="checkbox"/> Motor Vehicle Repair Shop – Store 26-50 ELVs on-site at any time [361-7.3(a)(1)]	
<input type="checkbox"/> Land Application and Associated Storage – Storage of Manure [361-2.3(b)] *	<input type="checkbox"/> Vehicle Dismantling Facility – Receive ≤ 25 ELVs/year and store ≤ 50 ELVs on-site at any time [361-7.3(a)(2)]	
<input type="checkbox"/> Land Application and Associated Storage – Land Application of Unrecognizable Food Processing Waste or Papermill Residuals [361-2.3(c)] *	<input type="checkbox"/> Scrap Metal Processors [361-7.3(a)(3)]	
<input type="checkbox"/> Land Application and Associated Storage – Land Application of Septage [361-2.3(d)] *	<input type="checkbox"/> Motor Vehicle Repair Shop - Store > 50 ELVs on-site at any time [361-7.3(b)(1)]	
<input type="checkbox"/> Land Application and Associated Storage – Storage of Septage [361-2.3(e)] *	<input type="checkbox"/> Vehicle Dismantling Facility - Receive > 25 ELVs/year or store > 50 ELVs on-site at any time [361-7.3(b)(2)]	
<input type="checkbox"/> Composting – Yard Trimmings [361-3.2(b)(1)] *	<input type="checkbox"/> Mobile Vehicle Crusher [361-7.3(b)(3)]	
<input type="checkbox"/> Composting – Source-separated Organics [361-3.2(b)(2)] *	<input type="checkbox"/> Used Cooking Oil and Yellow Grease Processing [361-8.3]	
<input type="checkbox"/> Composting – Road-killed Animals or Routine Animal Mortalities [361-3.2(b)(3)] *	<input type="checkbox"/> Navigational Dredged Material Handling and Recovery [361-9.2]	
<input type="checkbox"/> Composting – Digestate [361-3.2(b)(4)] *	<input type="checkbox"/> Combustion and Thermal Treatment – Waste Tires [362-1.3(a)]	
<input type="checkbox"/> Anaerobic Digestion [361-3.3(b)(1)] *	<input type="checkbox"/> Combustion and Thermal Treatment – Uncontaminated, Unadulterated Wood [362-1.3(b)]	
<input type="checkbox"/> Fermentation for Source-separated Organics [361-3.4(b)(1)] *	<input type="checkbox"/> Combustion and Thermal Treatment – Used Cooking Oil or Yellow Grease [362-1.3(c)]	
<input type="checkbox"/> Animal Feed Production [361-3.5(b)(1)] *	<input type="checkbox"/> Combustion and Thermal Treatment – Alternative Fuel Storage [362-1.3(d)]	
<input type="checkbox"/> Other Organics Recycling [361-3.6(b)(1)] *	<input type="checkbox"/> Transfer Facility [362-3.3]	
<input type="checkbox"/> Mulch Processing [361-4.3] *	<input type="checkbox"/> Landfill Reclamation [363-11.2]	
<input type="checkbox"/> CDDHRF – Concrete, Brick, Rock [361-5.2(a)(1)]	<input type="checkbox"/> RMW Treatment, Storage, and Transfer – Storage of Radiological RMW [365-2.3(a)] *	
<input type="checkbox"/> CDDHRF – Asphalt Pavement or Millings [361-5.2(a)(2)]	<input type="checkbox"/> RMW Treatment, Storage, and Transfer – Treatment of less than 500 lbs/month at the Site of RMW Generation [365-2.3(b)] *	
<input type="checkbox"/> CDDHRF – Asphalt Roofing Shingles [361-5.2(a)(3)]	<input type="checkbox"/> RMW Treatment, Storage, and Transfer – Healthcare Facilities that Treat, Store or Dispose of RMW from Other Generators (except Part 364 Transporters) [365-2.3(c)] *	
<input type="checkbox"/> CDDHRF – Gypsum Wallboard [361-5.2(a)(4)]	<input type="checkbox"/> Infectious Waste Management – Storage at the Site of Waste Generation [365-3.3(a)] *	
<input type="checkbox"/> CDDHRF – Uncontaminated, Unadulterated Wood [361-5.2(a)(5)]	<input type="checkbox"/> Infectious Waste Management – Storage/Transfer Locations Other than the Site of Generation [365-3.3(b)] *	
<input type="checkbox"/> CDDHRF – Soil/Sand/Gravel/Rock without contamination [361-5.2(a)(6)] Cannot be combined with 361-5.2(a)(7)	<input type="checkbox"/> Infectious Waste Management – Temporary Treatment Devices at the Site of Waste Generation [365-3.3(c)] *	
<input type="checkbox"/> CDDHRF – Restricted Use Fill, Limited-Use Fill [361-5.2(a)(7)] Cannot be combined with 361-5.2(a)(6)	<input type="checkbox"/> Used oil collection centers [374-2.10(a)]	
<input type="checkbox"/> CDDHRF – Other CDD with Case-Specific BUD [361-5.2(a)(8)]	<input type="checkbox"/> Facility that holds a Federal Select Agent Program registration and inactivates BSL and ABSL 3 waste on-site* [9/19/19 EDL Para. VIII and 365-2.3(b)]	
12. CERTIFICATION		
I hereby affirm under penalty of perjury that information provided on this form and attached statements and exhibits was prepared by me or under my supervision and direction and is true to the best of my knowledge and belief, and that I have the authority as _____(title) of _____(entity) to sign this registration form pursuant to 6 NYCRR Part 360, Section 360.15. By signing this registration form, I affirm that I have read the applicable regulations and will abide by all conditions of the registration requirements under Parts 360, 361, 362, 363, and 365, as applicable. I am aware that any false statement made herein is punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.		
Printed/Typed Name	Signature	Date

Thank you!



Sally Rowland, Ph.D., P.E.

Sally.Rowland@dec.ny.gov

Molly Trembley, P.E.

Molly.Trembley@dec.ny.gov

NYSDEC Division of
Materials Management



Department of
Environmental
Conservation