## Agricultural Livestock Operation Permit Application General Information

Applications are completed in a series of steps. Please complete the fields below and then press **Next**. You will then be able to **Complete** required forms, **Attach** project documentation, **Include** your digital signature, and **Submit** your application to the DNR.

### **Basic Permit Info**

NOTE: Missing or incomplete fields are highlighted on the application and at the bottom of each page. Once all required fields are completed you may navigate away from that page. After navigating away from a page, you may return to it to make changes.

Project Name

(Required: Project will be saved to system using this name)

Emerald Sky Dairy LLC Farm Improvements

- Permit Applications: List your operation name
- Plans and Specifications: Enter the facility type or reviewable project (Waste Storage Facility; Feed Storage Facility; Phase II Groundwater Monitoring); A list of option is listed at the bottom of page 1 of the Reviewable Facilities and Systems Checklist)
- Nutrient Management Plans: Enter the facility type and reviewable project (5-Year NMP, NMP Update, Annual Report or NMP Substantial Revision)

Permit Action Engineering Plans and Specifications or Reports

Activity <u>3400-pns</u>
Facility County <u>St. Croix</u>

Facility Name Emerald Sky Dairy LLC

Facility Number 14136

Engineering Plans & Specifications for a New or Modified Facility or System (including Groundwater Monitoring), or Operating Methods (Chemical Addition or Combined Wastes) [NR 243.15, NR 243.17 or NR 243.18]

- Fill out the project and facility information above and press Next
- Fill out Form 3400-25C Reviewable Facilities and Systems Checklist.
- Attach Design Report
- Attach Drawings

#### Section II: Site Information (Must be completed for each site.) This operation uses the site for (check all that apply): ☐ Animal housing ☐ Manure storage ☐ Feed storage **INSTRUCTIONS:** Read the attached instructions before entering the site description information. A separate Site Information section must be filled out for the main site and any other site(s) which are owned or operated by your farm for the purpose of housing animals, storing manure, or storing feed associated with your operation. Remember a site map and Current/Projected AU Calculation Worksheet(s) must also be included with each Site Information section. Name & Physical Location of Operation Name of Farm/Operation (Site Name): City: State: Zip: Location Address: WI O City O Town O Village О E QQ: County Township: Range: Section: Q: Select... Select... Ν $\bigcirc$ w Current/Projected Animal Units & Expansion Dates 1. Use the Current AU Calculations Worksheet (Form 3400-025A) to calculate the total number of animal units presently held in confinement or feeding facilities for more than 45 days in a 12 month period at this site. Attach the corresponding Current AU Calculations Worksheet to this Site Description section. Check here if there are no animals housed at this site for more than 45 days in a 12 month period. 2. Use the Projected AU Calculations Worksheet (Form 3400-025A) to determine the proposed number of animal units that will be held in confinement or feeding facilities for more than 45 days in a 12 month period at this site within the next five years. Attach the corresponding Projected AU Calculations Worksheet to this Site Description section. Check here if there is no proposed expansion(s) at this site within the next five years. 3. List the date of proposed expansion(s) (i.e. increase in animals, constructing new structures, modifying existing structures) at this site within the next five years (MM/YY). These dates should correlate with the information provided for the proposed structures and systems listed in the tables below and the projected animal numbers provided on the Projected AU Calculations Worksheet: Expansion 2: Expansion 4: Expansion 1: Expansion 3: Expansion 5: Check here if your expansions(s) will disturb one (1) acre or more of soil. Types of Manure Storage/Composting Facilities/Wastewater Storage/Treatment Facilities List all existing and proposed manure storage, composting facilities, process wastewater storage, and treatment facilities located at this site. These may include earthen, earthen with a concrete floor, synthetically lined, concrete, steel above ground tank, below ground storage tank, anaerobic lagoon, roofed storage shed, under-floor storage, stacking slab (clay or concrete), unconfined manure stack, etc. Identify the type of waste(s) (e.g. solid manure, liquid manure, feed storage runoff or lot runoff, process wastewater, septic waste, digester, etc.) that is stored and the date the storage was built or the proposed date of construction. Specify the type of design documentation such as plans and specifications, post construction documentation, and/or an engineering evaluation you may have of the structure. If no documentation exists, indicate none in the space provided. All the existing and proposed structures must be identified on the site map associated with this description. Storage Facility Design Existing or Total Volume Waste Year Storage Type Type of Waste containin (gallons/tons) **Documents** Built Proposed g Facility # Select... Select... Select... Select... Types of Outside Animal Lots / Confinement Areas List all existing and proposed outside animal lots/confinement areas located at this site. These may include outdoor barn yard or feedlot, housed under roof or partially housed under roof, or outdoor vegetated area. This does not need to include total confinement barns. Identify the number, avg. weight, and type of animals (e.g. 50/800lbs/heifers) and whether or not there is a runoff control system associated with the lot. Types of runoff control systems may include vegetated treatment area, collection tank, roof, etc. Specify the type of design documentation such as plans and specifications, post construction documentation, and/or an engineering evaluation you may have of the area. If no documentation exists, indicate none in the space provided. All the existing and proposed outside animal lots and confinement areas must be identified on the site map associated with this description. Existing or Outdoor Lot / Runoff Control Confinement Area Design Confinement Number/Avg. weight(in lbs.)/Type Document Proposed Confinement Area Type Area # Select... Select... Select... Select...

		Select					
Types of Feed Storage Areas							
List all <b>existing</b> and <b>proposed</b> feed storage areas located at this site. These may include upright silos, earthen/concrete bunkers, etc. Identify the type and amount of feed stored (e.g. corn silage/100 tons). Specify the type of design documentation such as plans and specifications, post construction documentation, and/or an engineering evaluation you may have of the area. If no documentation exists, indicate none in the space provided. All the existing and proposed feed storage areas must be identified on the site map associated with this description. Check the box if bags are used for feed storage  Check here if bags are used for feed storage							
Feed Storage Area#	Existing or Proposed	Feed Storage Area Type	Type & Amount of Feed Stored	Runoff Control	Feed Storage Area Documentation		
	Select	Select		Select	Select		
Types of Runoff Control Systems							
List all <b>existing</b> and <b>proposed</b> runoff control systems located at this site. These may include vegetated treatment area, collection tank, roof, etc. Identify the associated outdoor lot, confinement area, or feed storage. Specify the type of design documentation such as plans and specifications, post construction documentation, and/or an engineering evaluation you may have of the system. If no documentation exists, indicate none in the space provided. All the existing and proposed runoff control systems must be identified on the site map associated with this description							
Runoff Control System #	Existing or Proposed	Type of Runoff Control System	Associated Outdoor Lot of Feed Storagey		Runoff Control System Design Documentation		
	Select	Select	Select		Select		

### Other Site Information

Please select the site that serves as the primary site for this operation:

State of Wisconsin Department of Natural Resources PO Box 7185, Madison, WI 53707-7185

### **CAFO Reviewable Facilities and Systems Checklist for Livestock/Poultry Operation WPDES Permit Application**Form 3400-025C (R 10/14) Page 1

Page 1 of 5

Applicants must use this form for a proposed facility or existing facility evaluation reviewable under ss. NR 243.15 or 243.16. Page 1 of this form may be used for activities reviewable under s. NR 243.17 (see list below). (Unless otherwise noted, citations refer to Wis.

Administrative Code.)									
I. Operation Information									
Operation		Conta	ict (F	irst , Last)					
Emerald Sky Dairy LLC		Tod	d		Tuls				
Mailing Address -Street, Route or Box		Mailir	ng Ad	dress -City		S ta	te	Zip Code	
2670 D Road		Risir	ng C	ity		NE	<u>.</u>	68658	
Location Address -Street, Route or Box		Locati	ion A	ddress- City		S tate		Zip Code	
2487 County Road G		Eme	erald			WI		54013	
County	● Town ○ Village ○	) O:t-:	Sec	Section (01 -36)		Township (01-53)		- 101	
St. Croix	● Town ○ Village ○ EMERALD;T	City	22	2		30	N	16	○ E ● W
Phone Number (incl. area code)	Cell Phone Number		Fax	Number (incl. area cod	le)		mail		
402-526-2385							todd@tulsda	iries.com	
	O a new CAI	FO			WPDES	Pern	nit Number		
This Operation is (ch	heck one):  • an existing				0059	31	5		
		, 0, 11 0							
II. Design Engineer									
Company			Ena	ineer Name (First, La	st)				
Williams Engineering Serv	ices,LLC				lliams				
Mailing Address - Street, Route or I	Box					Zip Code			
E14910 Bears Grass Road			_	Augusta WI 54722					
Phone Number (w/ area code)  Cell Phone (w/ area code)			Fax Number (w/ area code) E-mail Address:						
715-286-3231 715-829-3231				wes@chipvalley.com					
Alternate Contact (First, Last)	E-mail				Phone Nu	mber	(w/ area code	e)	
	, Profession	Engine	er WI	License 35284					
Preparer is a (sele	ectione):			igineering Practitioner	r (DATCF	/ Co	ounty /NRCS e	engineers or	techs)
Reviewable Project Type (	check all that apply): M	1odific	atio	n , check types					
✓ Manure storage (NR 243.15(3	3) & NRCS 313)		<b>✓</b>	Manure Stacking (N	NR 243.1	5(8)	& NRCS 313)		
Manure Transfer Pipe (NR 243.15(4) & NRCS 634)			Manure Transfer Channel (NR 243.15(4) & NRCS 634)						
			Detention Basin (NR 243.15(3), NRCS 313 & CPS 1001)						
Digester (NR 243.15(5) & NRCS 313, 634)			Non-Ag Waste Addition for Digester (NR 243.17(1), (2) & NRCS 313)						
Composting (NR 243.15(8), 502.12 & NRCS 313)			Sand Separation (NR 243.15(4) & NRCS 632, 634)						
Solids Separation (NR 243.15(4) & NRCS 632, 634)			✓ Process Wastewater (NR 213 & NRCS 313)						
— — — — — — — (- ND 040 45(0))									
Vegetated Treatment Area (NR 243.15(2) & NRCS 635)			Runoit Controls (NR 243.15(2) & NRCS 635)   Irrigation Pipeline (NR 243.15(4) & NRCS 430, 634)						
Closure/Discontinuing (NR 243.17(7) & NRCS 360)				Biofilter (NR 243.15)					
•			Ш		(=), ( i ) <b>(</b> ii	(0	,	,	
Groundwater Monitoring (NR 2	1 <del>4</del> 3.13( <i>1))</i>								

## CAFO Reviewable Facilities of Systems Checklist for Livestock/Poultry Operation WPDES Permit Application

Page 2 of 5

Form 3400-025C (R 10/14)

### The preparer and owner understand all of the following:

- The DNR has 90 days to issue a decision once complete plans and specifications are received under ss. NR 243.15 or 243.17, Wis. Adm. Code. Evaluations under s. NR 243.16, Wis. Adm. Code are not subject to the 90 day limit. The owner must obtain all other state and local approvals.
- The proposed project complies with surface water and groundwater discharge limitations in s. NR 243.13.
- The number of copies required for both plans and specifications and evaluation submittals is listed on the WDNR Documentation and Electronic File Checklist, which can be found within the permit application packet or on our website at: http://dnr.wi.gov/topic/AgBusiness/CAFO/PlansSpecifications.html.
- It is a violation of ch. NR 243, Wis. Adm. Code, and/or the WPDES Permit to construct reviewable facilities prior to DNR approval.
- If an Environmental Impact Statement (EIS) is required, plans and specifications aren't complete until a
  complete EIS and/or permit application information is submitted to DNR. An approval on the plans and
  specifications can't be issued until the EIS is final, except statutory approval 90 days after complete plans
  and specifications are received by DNR.
- If the project will disturb 1 acre or more area, it is a violation of ch. NR 216 to begin disturbing soil (ex: grub, grade) before obtaining a WPDES Stormwater Construction Site General Permit.
- A post-construction report is required and shall be submitted to DNR in accordance with the conditional approval letter.
- Failure to submit all necessary information may result in rejection of the plans and specifications.

# CAFO Reviewable Facilities of Systems Checklist for Livestock/Poultry Operation WPDES Permit Application Form 3400-025C (R 10/14) Page 3 of 5

This is a summary. Also see ss. NR 243.15 or 243.16, Wis. Adm. Code, and applicable NRCS Standards. For each item, select the appropriate boxes and write the submittal page number(s) where the information is located.

Items Applicant Must Discuss with Regional Staff	Outcome				
I've contacted DNR Regional Staff to determine if an Environmental Assessment (EA) is required	Is an EIS required?	Yes	● No	)	
I've contacted DNR Regional Staff to determine if a NR 216 WPDES Stormwater Construction Site General Permit (Stormwater Permit) is required. To obtain a Stormwater Permit, submit a Notice of Intent.	Is a storm water permit required  If yes, has a Notice of Intent has been	es C subm		?	
I've reviewed the project location on the <u>DNR Surface</u> Water Data Viewer, wetland inventory layer & wetland indicator layer, <a href="http://dnr.wi.gov/topic/surfacewater/swdv/">http://dnr.wi.gov/topic/surfacewater/swdv/</a>	Is there wetland or wetland indicator are location?  • Yes O No  If yes, a wetland delineation/determic completed & a copy is enclosed with this	nation subm	has l	been	
Items Applicant Must Include	e in the Submittal	Yes	itted? No	Page(s)	
1 <u>Project Description</u> : Project summary that identifies each constructed/modified/abandoned & anticipated schedule		•	0	1-14	
2 Management Assessment - Narrative : Are each of the following described?				1-14	
a Options considered & the purpose of each proposed facility.			$\circ$	1-14	
ь Physical connections between proposed facilities & existing facilities.			0	1-14	
c Animal types, bedding type, waste characterization & ma	nure handling practices.	•	0	168- 170	
3 <u>Site Assessment - Narrative</u> : Are each of the following de	escribed?				
a Site map showing existing facilities and a site map showing	ng existing and proposed	•	0	93-102	
b Elevation of bedrock, seasonal high perched & regional graduation was encountered, estimate elevations from co					
available information.)	Elevations are estimate	•	$\circ$		
	Bedrock	$\odot$	$\circ$	40 f	t
	Perched Water	•	0	7.5 <sub>f</sub>	ft
	RW	: <b></b>	0	150 <sub>f</sub>	t
c Was bedrock, perched water or RWT encountered?		•	0		_
d If bedrock was found, what is the bedrock type?					
e Are all soil test pits/borings below the base of each review standards? ("Base" is the top of the floor of a lagoon or to or the ground surface of a vegetated treatment area.)		6	0	1-96	
f Did each soil test pit/boring reach deep enough to demoi separation distances from bedrock & saturation for each or 634)?		•	0	1-96	

# CAFO Reviewable Facilities of Systems Checklist for Livestock/Poultry Operation WPDES Permit Application Form 3400-025C (R 10/14) Page 4 of 5

Items Applicant Must Include in the Submittal					
4	Locations of flood prone areas, surface water features, karst features & groundwater supply wells			(s)	
	<1,000 ft from reviewable facilities or systems.				
а	Are any proposed facilities & systems located in the following areas?	$\circ$	$\odot$		
b	The site drains to an "impaired" water body: (http://dnr.wi.gov/org/water/wm/wqs/303d/2008/2008Updates.htm)	0	•		
С	Surface water quality mgmt. area (SWQMA), NR 243.03(66):				
	<1,000 ft from a lake, pond or flowage:	0	$\odot$		
	< 300 ft from a river, stream or floodplain:	0	$\odot$		
d	Area susceptible to groundwater contamination, s. NR 151.015(18):				
	<250 ft to a non-community groundwater supply well:	0	•		
	<1,000 ft to a community groundwater supply well:	0	•		
	<2ft soil depth to bedrock or groundwater:	0	$\odot$		
	<300 ft upslope or <100 ft downslope of a karst feature:	$\circ$	$\odot$		
	Soil does not exhibit at least one of the following:				
	<2 ft soil with at least 40% P200	$\circ$	$\odot$		
	<3 ft soil with at least 20% P200	$\circ$	$\odot$		
	<5 ft soil with at least 10% P200	0	$\odot$		
5	<u>Locations of tile drains</u> : Inspection for potential discharge points at channels and other surface water shorelines <1,000 ft from reviewable facilities or systems. If discharge points were found, locations of tile drain pipe lengths were determined.	•	0	93	
	<1,000 ft from a tile drain discharge point: <100 ft from a tile drain pipe length:	0	<ul><li>•</li><li>•</li></ul>		
6	Characterization of borrow areas for clay liner materials.	•	$\bigcirc$	102	
7	Site Assessment - Soil Logs : Are soil logs included?	•	0	15-88	
а	A soil log for each test pit/boring performed during this site assessment.	•	0		
b	Each soil log indicates the surface elevation at the test pit location & the elevation of saturation and bedrock (if either was encountered).	•	0		
8	<u>Safety &amp; Design Features</u> : Identify hazards to animal & people in the production area, & design features to minimize those hazards.	•	0	149,1 52	
9	<u>Operation &amp; Maintenance Plan</u> : Describe how the proposed production area facilities & systems must be operated & maintained, including the following:				
а	Statement that waste will be removed & utilized in accordance with an approved NRCS 590	•	0	48	
b	Describe methods of waste removal necessary to protect the integrity of any containment	•	0	11-12	
С	Monitoring, inspection & maintenance requirements to ensure that containment facilities	•	0	11-12	
d	Contingency operations to be implemented if the maximum operating level is reached for	•	0	11-12	
е	Emergency response procedures to be implemented if a spill or overflow occurs. (This is	•	0	11-12	

	CAFO Reviewable Facilities of Systems Checklist for Livestock/Poultry Operation WPDES Permit Application						
	Form 3400-025C (R 10/14)	Page 5 o					
10	<u>Construction Plan</u> : Describe construction coordination issues.	• 0	156- 160				
11	<u>Inspection Plan</u> : List construction items for inspection, by whom.	• 0	5-9				
12	Scaled Drawings & Maps: Are all of the following drawings and maps included?						
а	Location of the operation, existing & proposed facilities & systems, groundwater supply wells, soil test pits & borrow areas.	• 0	93- 107				
b	Site topography (7.5 min. topographic map, or equivalent) with surface water, concentrated flow paths, flood prone areas, sinkholes/karst features; & construction erosion control features.	• 0	83,96				
С	Map from DNR Surface Water Data Viewer, showing both wetland inventory layer & wetland indicator layer ( <a href="http://dnr.wi.gov/org/water/data_viewer.htm">http://dnr.wi.gov/org/water/data_viewer.htm</a> ).	•	96				
d	Detailed Drawings	•	108- 153				
13	<u>Waste Storage Additional Requirements</u> : If new or expanded waste storage is proposed, does the submittal include all of the following? (If no waste storage is proposed, put N/A in box.)	•	168- 171				
а	Management Assessment: Are each of the following described?	• 0	168-				
	Storage time >180 days for liquid manure (include calculations).		171				
	Land available for waste utilization.						
	Waste handling, transfer and removal methods.						
	Provisions for facility expansion.						
b	<u>Site Assessment</u> : Are potential impacts from failures identified, & is an assessment of the need for leak detection, collection & secondary containment included?	• 0	1-96				
	Are any proposed manure storage facilities located in the following areas:						
	<5 ft from base to saturation:	• •					
	<5 ft from base to bedrock:	$\bigcirc$ $\bullet$					
	<1,000 ft from storage facility to a karst feature:	$\bigcirc$ $\bullet$					
14	<u>Scaled Drawings - Additional Requirements</u> : Storage facility detail of permanent markers for Maximum Operating Level, Margin of Safety Level, and 180 Days Storage (near bottom). In lieu of a 180 day storage marker, waste storage depth markers in all waste storage ponds and a spreadsheet per pond may be used to calculate 180 days storage availability.	• 0	93- 107				

### Forms and Attachments

Fo help us make a decision in the shortest amount of time possible, the following Supplemental Attached Forms	information must be submitted:
Form 3400-025C (Reviewable Facilities of Systems Checklist):	
Pages 1 - 2 Completion Status:	Complete
Pages 3 - 5 Completion Status:	
Upload Required Attachments (15 MB per file lim  Evaluations / Plans and Specifications:	
Completion Status:	Complete

## **Evaluations / Plans and Specifications**

Upload Required Attachments (15 MB per file limit) - Help reduce file size and trouble shoot file uploads

Narrative	
	Narrative.pdf
Calculations	
■ File Attachment	
Drawings	
	EmeraldSkyPlan8-14-2017-5A.pdf
Geo Technical Rep	orts
	FULL-SoilInvestigationReport8-14-17.pdf
File Attachment  EmeraldFinalSkyDairyWetlandDelineationReport8-24- 16-1B.pdf	
■ File Attachment	ApplicableStandards8-14-17.pdf

### Sign and Submit Permit

### Steps to Complete the signature process

- 1. Read and Accept the Terms and Conditions
- 2. Press the Initiate Signature Process button
- 3. You will receive an email (within 5 minutes) with instructions to complete the signature process.
- 4. Follow the instructions in the email.

You will receive an acknowledgement email upon completing these steps.

#### **Terms and Conditions**

#### Certification:

I certify that the provided NMP Update information is:

- 1. in compliance with all NR243.19, Wis. Adm. Code, reporting requirements; and
- 2. all NMP update information has been reviewed by farm operator/owner.

### The preparer and owner certify all of the following:

- I am familiar with the plans and specifications submitted for this project, and I believe all applicable items in this checklist have been addressed. I further believe the proposed project will comply with surface water and groundwater discharge limitations in s. NR 243.13.
- For proposed activities, a post-construction report will be submitted to DNR with a statement that
  construction conforms with applicable Wis. Adm. Code, NRCS Standards, and approved plans and
  specifications.

I understand that pursuant to s. 283.91(4), Wis. Stats., any person who knowingly makes any false statement representation or certification in a document filed with the DNR may be punished by a fine of not more than \$10,000 or by imprisonment for not more than 6 months or both.

NOTE: For security purposes all email correspondence will be sent to the address you used when registering your WAMS ID. This may be a different email than that provided in the application. For information on your WAMS account click HERE.

Authorized Signature Signed by: i:0#.f|wamsmembership|overgard12 on 2017-08-14T13:24:08

✓ I accept the above terms and conditions.

After providing the final authorized signature, the system will send an email to the authorized party and any agents. This email will include a copy to the final read only version of this application.