IOWA DEPARTMENT OF NATURAL RESOURCES

Land Application of Solid Waste

Additional Sites

Application to add sites to an existing solid waste land application permit must be accompanied by the information required by the applicable solid waste rules under Iowa Administrative Code 567 Chapter 121.

Send completed applications with attached information to:

Iowa Department of Natural Resources
Land Quality Bureau
Solid Waste Section
502 East Ninth Street
Des Moines, IA 50319-0034

For questions concerning this application please contact the Department at (515) 281-8646.

SECTION 1. FACILITY CONTACT INFORMATION

Permit # 94 -SDP- 23 - 14 -LAN

Solid Waste Generator Name/Address:

Cargill Corn Milling, 1950 Harvest Avenue, Fort Dodge, IA 50501

Phone #: 515-574-7600 **Fax #:** _____

SECTION 2. PERMIT APPLICATION CHECKLIST

Checking the appropriate boxes below certifies that the documents submitted in conjunction with this application form are complete and in compliance with the applicable chapters of the Iowa Administrative Code. One (1) copy of each document shall be submitted. If an application is found by the department to be incomplete, it may be denied and returned to the applicant.

Required Documents			Attached
	Document/Information	**Administrative Code**	
Section A	List of all the sites being added. For each site include: • Name of site • Legal description of the site • Total acres in the site • Acres to be used for disposal • Name of landowner or tenant		X
Section B	Financial Assurance. **If** the additional site(s) will include additional storage of materials, include a revised cost estimate and proof of financial assurance in the revised amount.	IAC 567 121.8	*Checklist

For each site attach the following:			
Section C	Site map or aerial photo of the site showing the following: • The specific area where the material will be applied • Buildings, lakes, ponds, watercourses, wetlands, dry runs, rock outcroppings, roads. and other applicable details. • Soil types and slope • Location of wells *Please remember that the area to be used for land disposal:* • *may not have a slope of greater than 9%,* • *may not be within 200 feet of an occupied residence* • *may not be within 500 feet of a well* ***If the specific area requested includes any of the above the entire field will not be approved.***	IAC 567 121.7(1)"a"(1) IAC 567 121.7(1)"a"(1) IAC 567 121.7(1)"a"(2) IAC 567 121.7(1)"a"(1)	X
Section D	Soil testing	IAC 567 121.7(1)"a"(9)	*Checklist
Section E	Water table levels	IAC 567121.7(1)"a"(10)	X
Section F	Review by Soil Conservation District that includes the following: • Soil loss limits applicable to the site • Design soil loss levels for the site • Estimated current soil loss levels *The review may be done by the Natural Resources Conservation Service or a Professional Agronomist in lieu of the Soil Conservation District.*	IAC 567 121.7(1)"a"(3) IAC 567 121.7(1)"a"(6) IAC 567 121.7(1)"a"(7) IAC 567 121.7(1)"a"(8)	X
Section G	Proof of ownership or legal entitlement to use the site. (Agreement with landowner or tenant) *One document may be submitted for multiple sites with the same landowner or tenant.*	IAC 567 121.7(1)"b"(6)	X

SECTION 3. APPLICANT CERTIFICATION

CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

I further certify that the construction and operation of the above described facility will be in accordance with the plans, specifications, reports and related communications accepted by the Iowa Department of Natural Resources and on file in its office; and in accordance with conditions imposed in the permit issued by the Iowa Department of Natural Resources.

Signature: Sydney Pokorny **Date:** 12/10/2024

Printed Name: Sydney Pokorny **Title:** Facility Manager

Cargill Corn Milling, Fort Dodge, IA

Iowa DNR Land Application Permit # 94-SDP-23-14
Additional Sites Application Checklist: Sections A-G

A. List of All Sites Being Added

1. See attached Additional Sites List and Table 1 Master Site List including additional land application site and all previously approved land application sites. Each site list includes:
    - i. Name of Site
    - ii. Legal Description of Site
    - iii. Total Acres in the Site
    - iv. Acres to be used for disposal / Suitable Acres
    - v. Name of Landowner or Tenant

B. Financial Assurance

1. Financial assurance will not be updated or changed due to this being a new site addition with no additional volumes expected.

C. Site Map or Aerial Photo of Sites

1. See attached aerial site map of each additional site detailing:
    - i. The specific area where the material will be applied
        1. Site boundaries outlined on each aerial map
    - ii. Buildings, lakes, ponds, watercourses, wetlands, dry runs, rock outcroppings, roads, and other applicable details
        1. Site features and setbacks detailed on aerial maps
    - iii. Soil types and slope
        1. NRCS soil maps attached for each site
    - iv. Location of wells
        1. IDNR Well Search information attached for each site and active wells highlighted on aerial maps by 500 foot circular setback

D. Soil Testing

1. Soil testing will be completed as soon as possible prior to application of the site. Additional site soil sampling will be completed each time site is used for application and discussed in annual agronomist reports.

E. Water Table Levels

1. See attached Depth to Water Table outline for each specific site provided by NRCS.

F. Review by Professional Agronomist

1. See attached land application site suitability review performed by Extended Ag Services discussing soil loss levels through erosion and flooding potential.
    i. Extended Ag Services - Jim Nesseth, Certified Agronomist, License # 17118 and Andy Nesseth, Environmental Consultant.
2. See attached T Factor erosion potential outlines for each specific site provided by NRCS.

G. Proof of Ownership or Legal Entitlement to Use the Site

1. See attached Contractual Consent of Landowner, Lessee and/or Land Operator for the specific individual with this additional sites application.

Cargill Fort Dodge: Permit # 94-SDP-23-14 - Table 1 Master Site List

Site Name	Legal Description	Section	Township	Tier, Range	County	State	Acreage	Farmer Name
Durschmidt 113	N1/2 NE1/4	8	Deer Creek	90 N, 29 W	Webster	IA	113	Durschmidt Farms
Durschmidt 133	S1/4 of NE1/4 & N1/2 of SE1/4	5	Deer Creek	90 N, 29 W	Webster	IA	133	Durschmidt Farms
Durschmidt 143	SW1/4	16	Douglas	89 N, 29 W	Webster	IA	143	Durschmidt Farms
Durschmidt 153	SW1/4	4	Deer Creek	90 N, 29 W	Webster	IA	153	Durschmidt Farms
Durschmidt 19	W1/2 of NE1/4 of NW1/4	31	Douglas	89 N, 29 W	Webster	IA	19	Durschmidt Farms
Durschmidt 220	S1/2 of NW1/4 & SW1/4	28	Douglas	89 N, 29 W	Webster	IA	220	Durschmidt Farms
Durschmidt 230	E1/2 of SE1/4 - Sec 20; SW1/4 - Sec 21	20, 21	Douglas	89 N, 29 W	Webster	IA	230	Durschmidt Farms
Durschmidt 241	N1/2 of NE1/4 Sec 29, N1/2 Sec 28	28, 29	Douglas	89 N, 29 W	Webster	IA	241	Durschmidt Farms
Durschmidt 268	SW1/4 & E1/2 of NW1/4 & NE1/4	21	Douglas	89 N, 29 W	Webster	IA	268	Durschmidt Farms
Durschmidt 35	N1/2 of NW1/4	29	Douglas	89 N, 29 W	Webster	IA	35	Durschmidt Farms
Durschmidt 50	E1/2 of NE1/4	30	Douglas	89 N, 29 W	Webster	IA	50	Durschmidt Farms
Durschmidt 71	S1/2 of NW1/4	29	Douglas	89 N, 29 W	Webster	IA	71	Durschmidt Farms
Durschmidt 73	E1/2 of NW1/4	3	Douglas	89 N, 29 W	Webster	IA	73	Durschmidt Farms
Durschmidt 75	W1/2 of NE1/4	23	Johnson	89 N, 30 W	Webster	IA	75	Durschmidt Farms
Durschmidt 76	W1/2 of SE1/4	18	Johnson	89 N, 30 W	Webster	IA	76	Durschmidt Farms
Durschmidt 77	W1/2 of NW1/4	19	Deer Creek	90 N, 29 W	Webster	IA	77	Durschmidt Farms
Durschmidt 90	N1/2 of SE1/4	29	Douglas	89 N, 29 W	Webster	IA	90	Durschmidt Farms
Durschmidt 91	S1/2 of NE1/4	29	Douglas	89 N, 29 W	Webster	IA	91	Durschmidt Farms
Durschmidt Cain East	E 1/2 of NE 1/4 Sec 20, NW 1/4 Sec 21	20, 21	T89N, R30W	Johnson	Webster	180	179	Durschmidt Farms
Durschmidt Cain West	SE 1/4	18	T89N, R30W	Johnson	Webster	148	139	Durschmidt Farms
Durschmidt Hammer 7	W 1/2	7	Deer Creek	90N, 29W	Webster	IA	260	Durschmidt Farms
Durschmidt Hammer 19	S 1/2 & NE 1/4	19	Jackson	90N; 30W	Webster	IA	310	Durschmidt Farms
Durschmidt Hammer 20	N 1/2 of SW 1/4	20	Jackson	90N; 30W	Webster	IA	80	Durschmidt Farms
Durschmidt Hammer 25	E 1/2 of SE 1/4	25	Lizard	90N; 31W	Pocahontas	IA	75	Durschmidt Farms
Durschmidt Hammer 30	N 1/2 of NW 1/4	30	Jackson	90N; 30W	Webster	IA	44	Durschmidt Farms
Durschmidt Hood	SE1/4	22	Douglas	89 N; 29 W	Webster	IA	127	Durschmidt Farms
Durschmidt Jordison	NW1/4	27	Douglas	89 N; 29 W	Webster	IA	117	Durschmidt Farms
Durschmidt Kapustka	NW 1/4	23	Johnson	89N, 30W	Webster	IA	113	Durschmidt Farms
Durschmidt Lantz	W 1/2 & SW 1/4 of NE 1/4 & W 1/2 of SE 1/4 & SE 1/4 of SE 1/4	36	Lincoln	91N, 32W	Pocahontas	IA	448	Durschmidt Farms
Durschmidt Somers	W 1/2 of SW 1/4 & SE 1/4 of SW 1/4 Sec 31; SE 1/4 Sec 36; NE 1/4 Sec 1	31, 36, 1	Fulton, Greenfield, Cedar	88 N, 30 W; 88 N, 31 W; 87 N, 31W	Webster; Calhoun	IA	409	Durschmidt Farms
Durschmidt Starlite 13	W 1/2 NW 1/4 & N 1/2 SW 1/4	13	Douglas	89N, 29W	Webster	IA	101	Durschmidt Farms
Stumpf Riley	S1/2 of NW1/4	5	Burnside - Sumner	87 N; 28 W	Webster	IA	76	Stumpf Farms
Stumpf Farnhamville	S1/2	35	Reading	86 N, 31 W	Calhoun	IA	300	Stumpf Farms
Stumpf Fort Dodge	N1/2 of NE1/4 Sec 4; SE1/4 of SE1/4 of SE1/4 Sec 35; W1/2 of SW1/4 Sec 36	4; 35, 36	Elkhorn, Douglas	88 N, 29 W; 89 N, 29 W	Webster	IA	190	Stumpf Farms
Stumpf Gleason	NE1/4	29	Greenfield	88 N, 31 W	Calhoun	IA	152	Stumpf Farms
Stumpf Home	W1/2, W1/2 of E1/2 Sec 2; SE1/4 of SE1/4 Sec 3; E1/2 of NW1/4 Sec 11	2, 3, 11	Lake Creek	87 N, 33 W	Calhoun	IA	616	Stumpf Farms
Stumpf Knierim	E1/2 of NE1/4	10	Greenfield	88 N, 31 W	Calhoun	IA	73	Stumpf Farms
Stumpf Knierim 2	S 1/2 of SW 1/4	2	Greenfield	88N, 31W	Calhoun	IA	64	Stumpf Farms
Stumpf Lancaster	NW1/4	11	Clay	87 N, 29 W	Webster	IA	143	Stumpf Farms
Stumpf McGinity	E1/2 of SE1/4 & E1/2 of W1/2 of SE1/4	23	Twin Lakes	88 N, 33 W	Calhoun	IA	116	Stumpf Farms
Stumpf Peterson	E1/2 of SW1/4, NW1/4 of SE1/4	6	Elkhorn	88 N, 29 W	Webster	IA	115	Stumpf Farms
Stumpf Somers	NE1/2 of NW1/4, S1/2 of SW1/4, SE1/4	12	Cedar	87 N, 31W	Calhoun	IA	292	Stumpf Farms
Stumpf Belair	N1/2	30	Otho	88 N, 28 W	Webster	IA	240	Stumpf Farms
Stumpf Ferguson	E 1/2 of NE 1/4 & E 1/2 of W 1/2 of NE 1/4	4	Burnside	87 N, 28 W	Webster	IA	125	Stumpf Farms
Stumpf Grady	SE 1/4 & S 1/4 of NE 1/4	15	Otho	88 N, 28 W	Webster	IA	119	Stumpf Farms
Stumpf Larson	NE 1/4	9	Burnside	87 N, 28 W	Webster	IA	130	Stumpf Farms

Jason Durschmidt 1809 190th St, Fort Dodge, IA 50501 515-570-6322

Kevin Stumpf 2687 Dolliver Park Ave, Otho, IA 50569 515-571-2488

Cargill Fort Dodge: Permit # 94-SDP-23-14 - New Site List 11.21.24

Site Name	Description	Section	T, R	Township	County	Total Acreage	Suitable Acreage	Farmer Name
Durschmidt Lantz	W 1/2 & SW 1/4 of NE 1/4 & W 1/2 of SE 1/4 & SE 1/4 of SE 1/4	36	T91N, R32W	Lincoln	Pocahontas	463	448	Durschmidt Farms

Farmer	Phone	Address
Jason Durschmidt	(515) 570-6322	832 N 2nd Street, Fort Dodge, IA 50501

ENVIRONMENTAL
LAND MANAGEMENT LLC
waste byproduct landspreading specialists

Site Name:Durschmidt Lantz

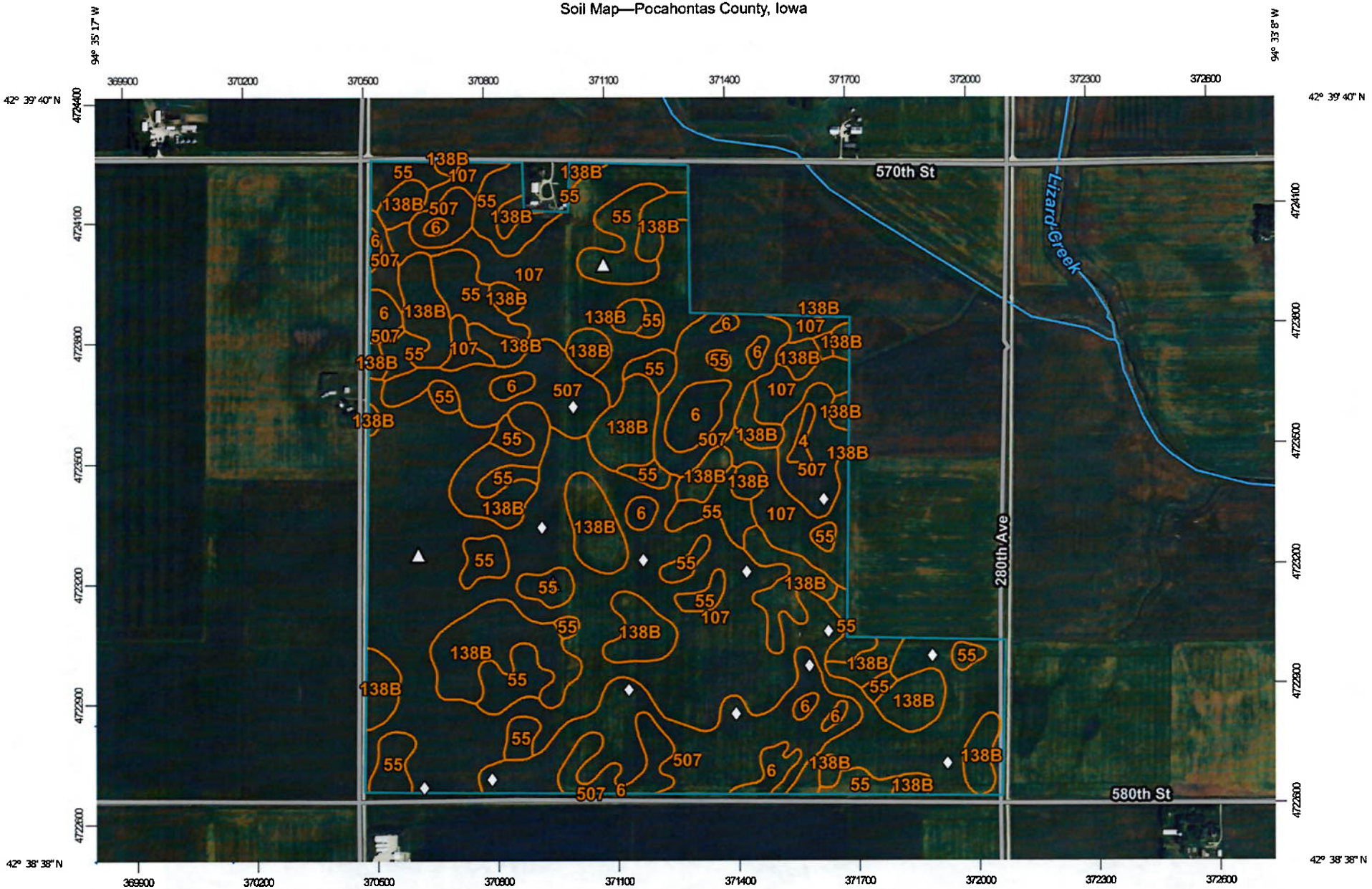
Unsuitable for Land Application

Farmer Name: Jason Durschmidt Phone: (515)570-6322 Spreadable Acres: 448 Deliverable Tons: 3581

I certify I have followed all stockpiling and spreading rules provided by ELM.

Signature_____ Date_____

Soil Map—Pocahontas County, Iowa



Map Scale: 1:13,400 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 150 300 600 900

Feet: 0 500 1000 2000 3000

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 15N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Pocahontas County, Iowa
Survey Area Data: Version 31, Aug 29, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Sep 5, 2021---Oct 14, 2021

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
4	Knoke silty clay loam, 0 to 1 percent slopes	1.2	0.2%
6	Okoboji silty clay loam, 0 to 1 percent slopes	21.2	4.6%
55	Nicollet clay loam, 1 to 3 percent slopes	63.8	13.7%
107	Webster clay loam, 0 to 2 percent slopes	205.5	44.2%
138B	Clarion loam, 2 to 6 percent slopes	96.7	20.8%
507	Canisteo clay loam, 0 to 2 percent slopes	76.2	16.4%
Totals for Area of Interest		**464.5**	**100.0%**

T Factor

Map unit symbol	Map unit name	Rating (tons per acre per year)	Acres in AOI	Percent of AOI
4	Knoke silty clay loam, 0 to 1 percent slopes	5	1.2	0.2%
6	Okoboji silty clay loam, 0 to 1 percent slopes	5	21.2	4.6%
55	Nicollet clay loam, 1 to 3 percent slopes	5	63.8	13.7%
107	Webster clay loam, 0 to 2 percent slopes	5	205.5	44.2%
138B	Clarion loam, 2 to 6 percent slopes	5	96.7	20.8%
507	Canisteo clay loam, 0 to 2 percent slopes	5	76.2	16.4%
Totals for Area of Interest			**464.5**	**100.0%**

Description

The T factor is an estimate of the maximum average annual rate of soil erosion by wind and/or water that can occur without affecting crop productivity over a sustained period. The rate is in tons per acre per year.

Rating Options

Units of Measure: tons per acre per year

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Lower

Interpret Nulls as Zero: No

Depth to Water Table

Map unit symbol	Map unit name	Rating (centimeters)	Acres in AOI	Percent of AOI
4	Knoke silty clay loam, 0 to 1 percent slopes	0	1.2	0.2%
6	Okoboji silty clay loam, 0 to 1 percent slopes	0	21.2	4.6%
55	Nicollet clay loam, 1 to 3 percent slopes	45	63.8	13.7%
107	Webster clay loam, 0 to 2 percent slopes	0	205.5	44.2%
138B	Clarion loam, 2 to 6 percent slopes	90	96.7	20.8%
507	Canisteo clay loam, 0 to 2 percent slopes	0	76.2	16.4%
Totals for Area of Interest			**464.5**	**100.0%**

Description

"Water table" refers to a saturated zone in the soil. It occurs during specified months. Estimates of the upper limit are based mainly on observations of the water table at selected sites and on evidence of a saturated zone, namely grayish colors (redoximorphic features) in the soil. A saturated zone that lasts for less than a month is not considered a water table.

This attribute is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

Rating Options

Units of Measure: centimeters

Aggregation Method: Dominant Component

Component Percent Cutoff: None Specified

Tie-break Rule: Lower

Interpret Nulls as Zero: No

Beginning Month: January

Ending Month: December

Well Search Report Site: Durschmidt Lantz

Included in search	No. of wells	Database
X	6	IGS well database General well database maintained by IGS, location accuracy varies 3,730 to 25 ft., last updated 8/2005.
X	0	Public wells Muncipal and nonmunicipal public well databases maintained by IGS, location varies 3,730 to 25 ft., under development.
X	0	SDWIS public wells Public well database developed from the Safe Drinking Water Information System database maintained by IDNR, estimated locational accuracy varies from 15m. to 3300m. Created from 5/2005 data.
X	8	Private well tracking system IDNR database management system for Grants-to-counties-covered wells. Locational accuracy unknown, assumed to be +/- 17 m., Last update 7/2005.
X	1	Wells registered for testing Wells tested under Grant-to-Counties program. Locational accuracy varies 1150 to 150 m.; Last update 9/2001, no future updates planned.
X	1	Permitted private wells Wells permitted under Grant-to-Counties program. Locational accuracy varies 1150 to 150 m.; Last update 9/2001, no future updates planned.
X	1	Registered abandoned wells Wells abandoned under Grant-to-Counties program. Locational accuracy varies 1150 to 150 m.; Last update 9/2001, no future updates planned.
X	0	Water use facilities Wells used by facilities permitted to withdraw >25,000 gallons per day, locational accuracy is +/-20m to 1150 m. Created from 7/2005 data.
X	0	Municipal wells and intakes Locational accuracy 220 m., last updated 8/96.
X	0	Ag drainage wells Locational accuracy 100 m., last updated 4/98.

Well Search Detail

Subject: XY UTM Coordinates: 371326/4723443
Search Radius (mi): 1

IGS Well Database

Map ID	Well No.	Location	Accuracy	Dist. From Point	Well Depth	Construction/ Permit Date	Owner/ Permittees	Other Information
57891	40075	T90N, R32W, 1, NW SW	Calc. +/- 930 ft.	1529 (m)	116	5/5/1971	Arends, Eldon	Bedrock Depth: 0 Well Type: Private
57927	11912	T90N, R32W, 1, NW	Calc. +/- 1870 ft.	1275 (m)	148	10/28/1959	Arends, Eldon	Bedrock Depth: 0 Well Type: Private
58600	10071	T90N, R31W, 6, NW NE NW	Calc. +/- 470 ft.	1544 (m)	430	1/1/1957	Korte, Joe	Bedrock Depth: 165 Well Type: Private
58655	9682	T90N, R31W, 6, NW	Calc. +/- 1870 ft.	(m)	190	1/1/1957	Korte, Joe	Bedrock Depth: 170 Well Type: Private
57782	45570	T90N, R32W, 1, NW NW SW	Calc. +/- 470 ft.	1331 (m)	124	5/21/1998	Korte, Leonard	Bedrock Depth: 0 Well Type: Private
57671	19122	T90N, R32W, 2, NE NE NE SE	Calc. +/- 230 ft.	1312 (m)	120	1/1/1966	Normann, John	Bedrock Depth: 0 Well Type: Private

Public Wells

Map ID	Well No.	Location	Accuracy	Dist. From Point	Well Depth	Construction/ Permit Date	Owner/ Permittees	Other Information
No records found from this data source								

SDWIS public wells

Map ID	Well No.	Location	Accuracy	Dist. From Point	Well Depth	Construction/ Permit Date	Owner/ Permittees	Other Information
No records found from this data source								

Private Well Tracking System

Map ID	Well No.	Location	Accuracy	Dist. From Point	Well Depth	Construction/ Permit Date	Owner/ Permittees	Other Information
56943	2220309	T91N, R32W, S26	nom. +/- 25m.	(m)	200	1/1/1992	Beneke, Margaret	Status: Active
57784	2006202	T90N, R32W, S1	nom. +/- 25m.	1331 (m)	130	5/21/1998	KORTE, LEONARD	Status: Active
57748	2081317	T90N, R32W, S1	nom. +/- 25m.	1236 (m)	70	6/1/1960	Korte, Leonard	Status: Active
57537	2101000	T91N, R32W, S36	nom. +/- 25m.	634 (m)	80	6/1/1940	Korte, Mary Lou	Status: Active
57673	2029713	T90N, R32W, S2	nom. +/- 25m.	1313 (m)	120	1/1/1966	NOMANN, Kenneth	Status: Inactive
57774	2077173	T90N, R32W, S2	nom. +/- 25m.	1552 (m)	25	7/1/1920	Nomann, Kenneth	Status: Active

58431	2082267	T91N, R31W, S31	nom. +/- 25m.	1544 (m)	110	6/1/1980	Ricklefs, Erna	Status: Active
58442	2226667	T91N, R31W, S31	nom. +/- 25m.	1572 (m)	150	1/1/1950	Ricklefs, Harrold	Status: Active

Wells Registered For Testing

Map ID	Well No.	Location	Accuracy	Dist. From Point	Well Depth	Construction/ Permit Date	Owner/ Permittees	Other Information
57678	40536	T91N, R32W, Sec. 25, SE, SE, NW	Calc. +/- 570m.	1252 (m)	100	1979	Lenz, Clifford	Drilling method: Bored; Known well depth

Permitted Private Wells

Map ID	Well No.	Location	Accuracy	Dist. From Point	Well Depth	Construction/ Permit Date	Owner/ Permittees	Other Information
57780	23524	T90N, R32W, Sec. 1, NW, NW, SW	Calc. +/- 140m.	1332 (m)	124	5/15/1998	Korte	Primary use: household

Abandoned Wells (plugged)

Map ID	Well No.	Location	Accuracy	Dist. From Point	Well Depth	Construction/ Permit Date	Owner/ Permittees	Other Information
57703	29042	T91N, R32W, Sec. 25, SE, SW, SE	Calc. +/- 140m.	(m)	71	n.a.	Lenz, Cliff	Well plugged: nil; Well type: < 18" dia.

Water Use Facilities

Map ID	Well No.	Location	Accuracy	Dist. From Point	Well Depth	Construction/ Permit Date	Owner/ Permittees	Other Information
No records found from this data source								

Municipal Wells And Intakes

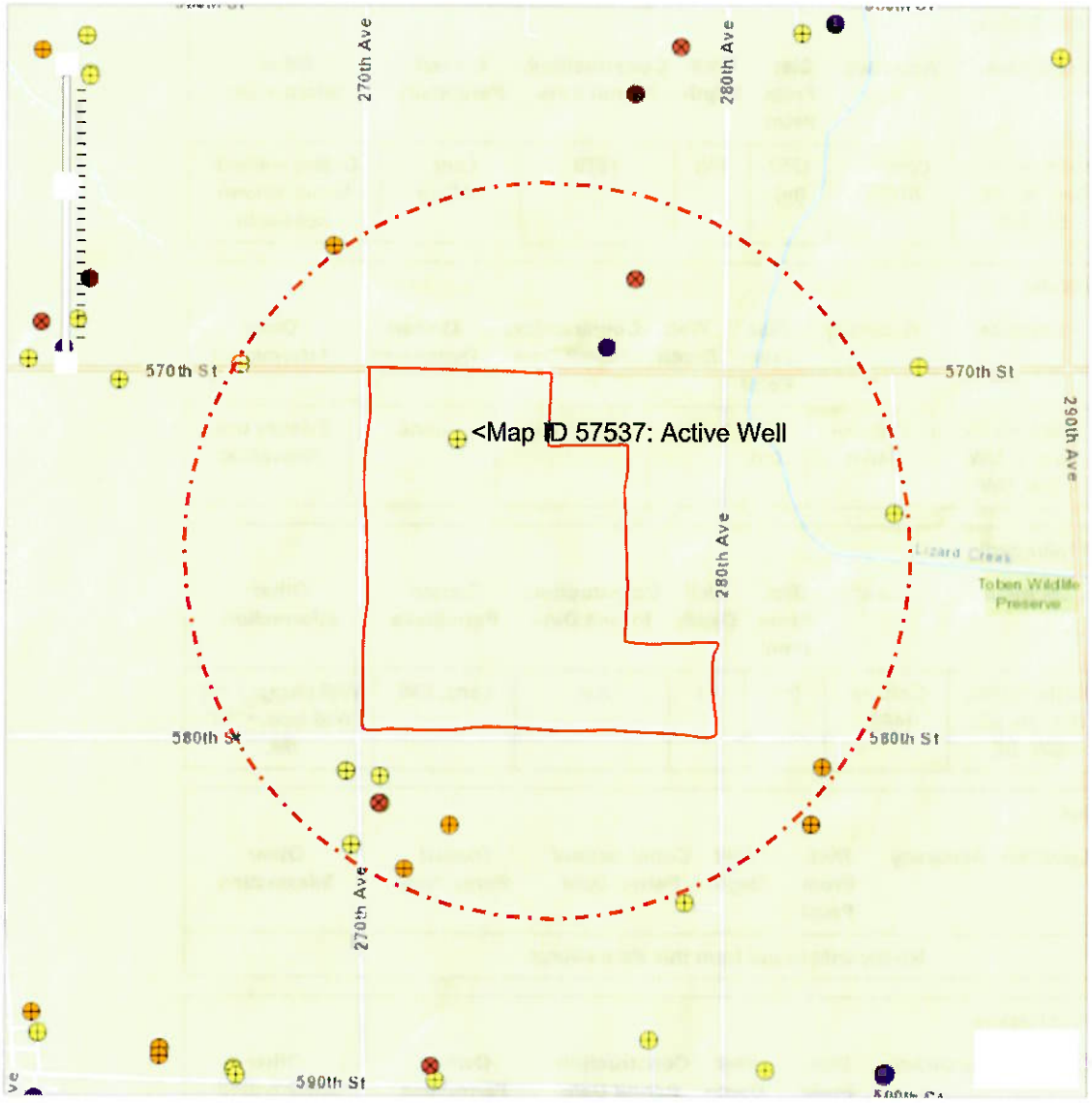
Map ID	Well No.	Location	Accuracy	Dist. From Point	Well Depth	Construction/ Permit Date	Owner/ Permittees	Other Information
No records found from this data source								

Ag Drainage Wells

Map ID	Well No.	Location	Accuracy	Dist. From Point	Well Depth	Construction/ Permit Date	Owner/ Permittees	Other Information
No records found from this data source								

Well Search Buffered Map

Subject: XY UTM Coordinates: 371326/4723443
Search Radius (mi): 1



Map Notes:
- UST
- LUST
- Wells

Please refer to the Accuracy column in Well Search Detail.
Since multiple points can be at the same spot (as those located to the center of a quarter section), points were randomly dispersed within 10 meters around that spot so all points can be seen.

EXTended Ag Services, Inc.

202 South Highway 86
Lakefield, MN 56150
507.662.5005 phone
507.662.5105 fax
info@extendedag.com

November 19, 2024

Environmental Land Management

1602 11th Drive NE

Austin, MN 55912

RE: Review of Potential Land Application Sites – Cargill Fort Dodge

Michael,

We have completed our review of the proposed land application sites for the Cargill facility in Fort Dodge, Iowa. Thank you for the opportunity to provide our input on this project. The following field was included in this review, all acres are approximate:

Site Name	Acres
Cargill Fort Dodge Durschmidt Lantz	463.7
Grand Total	**463.7**

Imagery provided by the National Ag Imagery Program (2021) was utilized to determine whether land application sites were in crop production, pasture/hay or non-farmed land. Overall, the land application sites have few limitations regarding slope steepness and length and general erosion potential.

There are approximately 463.7 acres available for land application of the industrial by-product. The land application site is dominated by clay loams, silty clay loams and loams. All soils have an acceptable soil texture for land application.

According to the NRCS, 100% of the sites have acceptable slopes for the land application of the Cargill byproducts (0-9%). Regarding erosion concerns, approximately 78.5% of the identified soils are classified as having 'slight' concerns, and 21.5% are considered to have no concerns regarding erosion potential.

Field specific planning and/or residue management should be utilized when applying the byproduct to reduce the potential for movement offsite, on all sites. Application can and should be limited to areas with the lowest slope first and then be directed to areas the furthest from sensitive features such as water. The application of the byproduct is not expected to conflict with any Conservation Plans associated with the observed soils. A summary of slope ratings for the potential land application sites is included below:

Slope Range	Acres
0-1%	22.9
0-2%	280.7
1-3%	63.7
2-5%	96.4
Grand Total	**463.7**

None of the soils identified as potential land application sites are listed by the NRCS soil survey as ponded, commonly or frequently flooded. It is assumed that agricultural drain tile has been installed, to varying degrees, on soils with poor or somewhat poor drainage. Flooding frequency is not expected to be a limiting factor for land application. However, land application on saturated soils should be avoided at all times. Further, land application on fields with higher slope ranges and predicted rainfall within 24 hours should be limited. A complete breakdown of flooding frequency ratings is shown below:

NRCS Flooding Frequency	Acres
NONE	440.9
PONDED	22.9
Grand Total	**463.7**

Determining appropriate land application rates for any by-product is dependent on the most restrictive variable. This can be either slope, erosivity, flooding potential, soil fertility levels, soil texture or byproduct characteristics, to name a few. The recommendations given herein are independent of any byproduct reviews and only consider the known field characteristics discussed in this review.

Application rates of approximately 15 Wet Tons per acre are appropriate for the field conditions of the land application sites discussed in this review. Appropriate measures should be taken to ensure minimal movement of the waste respect to adequate setbacks from sensitive features (surface water, karst features, conduits to water and high slopes) and land application rates. Special care should be given to applying wastes no less than 48 hours prior to rainfall events of greater than 0.5 inches. Wastes should be incorporated whenever possible, if such practices do not conflict with existing NRCS conservation plans. Applications of organic by-products can result in improved soil fertility, tilth and structure, if properly managed. The soils and parent material on the proposed land application site are naturally acidic in nature. Agricultural lime should be applied to ensure the soil pH is above 6.0 prior to land application of any byproducts.

Summary

The specified land application material should be evaluated for constituents that pose a risk to the general health and welfare of the public. In general, land utilized for the land application of solid waste containing nutrients needed for pasture or crop production will benefit from such applications. Careful consideration should be taken to ensure nutrients are not applied at levels greater than crop need, once soils have reached the high fertility range as defined by Iowa State University.

In summary, we believe the field conditions are suitable for land application of solid wastes if done in accordance with all applicable rules, permits and laws. If you have any questions, please do not hesitate to contact us.

Sincerely,

Jim Nesseth
Certified Agronomist
License #: 17118

Andrew Nesseth
Environmental Consultant
NRCS Technical Service Provider

Contractual Consent of Landowner

Landowner, Lessee and/or Landoperator: Jason Durschmidt
Location of storage sites and spreading site(s): All permitted sites owned, leased and rented.
Description of byproduct to be stored and land applied on site(s): Byproduct waste consisting of wastewater solids generated from the Cargill Corn Milling facility in Fort Dodge, IA. The facility has a pre-treatment plant and a de-watering process, in which solids are recovered. Scrap feed consisting of animal corn feed unsuitable for animal consumption.
Wastewater byproduct & scrap feed is generated from: Cargill Corn Milling – Fort Dodge

Analysis of wastewater pretreatment byproduct on a "dry" basis:
****Analysis is not guaranteed for agronomic value. Byproduct output will be variable.*

Total Solids	14.8	%	Arsenic	none detected
pH	7.06		Barium	18.8 mg/kg
Tot.Kjeldahl Nitrogen	6.45	%	Cadmium	none detected
Ammonia Nitrogen	0.08	%	Chromium	30.3 mg/kg
Phosphorus	3.68	%	Copper	24.2 mg/kg
Potassium	0.50	%	Iron	919.3 mg/kg
Calcium	5.83	%	Lead	none detected
Magnesium	0.60	%	Manganese	54 mg/kg
Sodium	0.43	%	Mercury	none detected
Chloride	0.35	%	Molebdenum	none detected
Zinc	481	mg/kg	Nickel	31.9 mg/kg
			Selenium	8.6 mg/kg
			Silver	none detected

Analysis of scrap feed byproduct on a "dry" basis:
****Analysis is not guaranteed for agronomic value. Byproduct output will be variable.*

Total Solids	48.5	%	Arsenic	none detected
pH	4.59		Barium	none detected
Tot.Kjeldahl Nitrogen	2.86	%	Cadmium	none detected
Ammonia Nitrogen	0.15	%	Chromium	none detected
Phosphorus	0.42	%	Copper	3 mg/kg
Potassium	0.49	%	Iron	65.7 mg/kg
Calcium	3.40	%	Lead	none detected
Magnesium	0.29	%	Manganese	5 mg/kg
Sodium	0.12	%	Mercury	none detected
Chloride	0.15	%	Molebdenum	none detected
Sulfur	0.29	%	Nickel	none detected
Zinc	46.4	mg/kg	Selenium	none detected
			Silver	none detected

***Check with your Agronomist to verify that these nutrients and other constituents are not harmful to the crops you are growing during the coming year.

This material may contain off specification feed products and it should not be considered safe for consumption by livestock. By accepting this material for land application the landowner, lessee and/or land operator shall not allow consumption of this material, whether stockpiled or land applied, by livestock.

I have reviewed this information and am authorized to hereby give permission to Environmental Land Management, LLC to store and land apply the above byproduct on the spreading sites. If, in the future, I decide not to allow Environmental Land Management, LLC to store and land apply the aforementioned byproducts on these sites, I will inform them before it is delivered to the sites.

Signed: _____ Date: 2/8/18