STATE OF MINNESOTA

Minnesota Pollution Control Agency

Industrial Division

National Pollutant Discharge Elimination System (NPDES)/
State Disposal System (SDS) Permit MN0001686

PERMITTEE:	Birds Eye Foods LLC		
FACILITY NAME:	Birds Eye Foods LLC - Waseca		
CITY OR TOWNSHIP:	Woodville	**COUNTY:**	Waseca
ISSUANCE DATE:		**EXPIRATION DATE:**	

The state of Minnesota, on behalf of its citizens through the Minnesota Pollution Control Agency (MPCA), authorizes the Permittee to operate a disposal system at the facility named above and to discharge from this facility to the receiving water named above, in accordance with the requirements of this permit.

The goal of this permit is to reduce pollutant levels in point source discharges and protect water quality in accordance with Minnesota and U.S. statutes and rules, including Minn. Stat. chs. 115 and 116, Minn. R. chs. 7001, 7050, 7053, 7060, and the U.S. Clean Water Act.

This permit is effective on the issuance date identified above, and supersedes the previous permit that was issued for this facility on November 6, 2006. This permit expires at midnight on the expiration date identified above.

Signature: _____

Jeff Udd, P.E.
Supervisor, Water Quality Permits Unit
Water Section
Industrial Division

for The Minnesota Pollution Control Agency

Submit DMRs to:
Attention: Discharge Monitoring Reports
Minnesota Pollution Control Agency
520 Lafayette Rd N
St Paul, MN 55155-4194

Submit Other WQ Reports to:
Attention: WQ Submittals Center
Minnesota Pollution Control Agency
520 Lafayette Rd N
St Paul, MN 55155-4194

Questions on this permit?

- For DMR and other permit reporting issues, contact: Jennifer Satnik, 651-757-2692.
- For specific permit requirements or permit compliance status, contact: Craig Weingart, 507-206-2655.
- General permit or NPDES program questions, contact: MPCA, 651-282-6143 or 1-800-657-3938.

Table of Contents

Facility Description

The Birds Eye Foods Inc – Waseca facility (Facility) is located at T107N, R22W, Section 18, Woodville Township, Waseca County, Minnesota. The principal activity at this Facility is the processing of peas and sweet corn during the vegetable harvest season and the packaging of frozen vegetable blends on a year-round basis.

Wastewater Management

Wastewater generated at the Facility consists of contact and non-contact stormwater; contact and non-contact cooling water; process and cleanup waste water from vegetable processing; sweet corn silage leachate; and, sweet corn silage pressate. Sanitary wastewater from the Facility is routed to the city of Waseca Waste Water Treatment Facility (WWTF).

An on-site waste water management system, primarily involving spray irrigation of wastewater (WS001), is operated by the Permittee at their site in Waseca. The on-site waste water management system consists of a 12,000 gallon wet well; a 16 acre, 44.6 million gallon (MG) bentonite-lined storage pond equipped with six aerators, providing surge capacity and wet weather storage of the wastewater at Sprayfield Site 1; a silage storage area located at Sprayfield Site 2, which has a 0.16 MG silage leachate pond; a series of 12 ground water monitoring wells for monitoring the application of wastewater at the sprayfields and the silage collection and storage site; and, a series of drain tiles and zero discharge pump stations with two spray sites for the land treatment of wastewater. Use of the various components of the on-site system is described in the following paragraphs.

There is no authorized discharge to surface water.

Industrial Storm Water

Contact storm water at the Facility is collected and routed for treatment with process wastewater, as described below. Non-contact storm water drains from the Facility in a non-specific manner. This permit covers stormwater management standards for the facility, which are required for industrial facilities included in one of the 11 categories of industrial activity defined in federal regulation 40 CFR § 122.26.

Cooling Water

Contact cooling water from plant evaporators is contained in a closed-loop system and is discharged approximately once a year to the process waste water wet well. Non-contact cooling water is discharged at an average and maximum rate of 0.055 and 0.50 million gallons per day, respectively, to the wastewater storage pond and spray irrigated.

Process Wastewater

Vegetable process and clean-up wastewater is generated on a year-round basis. The maximum hydraulic volume authorized for land application is 85 MG per year to Sprayfield Site 1, and 75.4 MG per year to Sprayfield Site 2. Process wastewater is collected in the plant gutters to a settling well and to a mesh screen prior, and then flows by gravity to a 12,000 gallon wet well located at Sprayfield Site 1. Wastewater is either pumped directly for spray irrigation at either Sprayfield Site 1 or Sprayfield Site 2, or is stored in the 44.6 MG basin located at Sprayfield Site 1 prior to land treatment via spray irrigation at agronomic rates during the cropping season. The discharge of vegetable process and clean-up wastewater directly to surface waters is not authorized by this permit; these wastewaters are managed via spray irrigation to authorized spray sites.

Sprayfield Sites

Land application of process waste water is conducted on two authorized sites at the Facility, which consist of six fields totaling 506 acres: Sprayfield Site 1: LA351, 244 acres (Fields A, B/C, D); and, Sprayfield Site 2: LA352, 262 acres (Fields E/F, G, H).

Tile Line Discharges

Sprayfield Sites 1 and 2 are underlain by a drain tile system. Tile line discharges from Sprayfield Site 1 can be collected using two zero discharge systems (designated East and West); tile lines for Sprayfield Site 2 and Site H can be collected in separate zero discharge systems. If water quality in the tile lines exceed permit limits, or daily observations dictate corrective action, the zero discharge systems can collect tile line discharges for reapplication directly onto the irrigation fields or transfer to the storage basin prior to respraying. The Facility is required to monitor the water quality of drain tile line discharges throughout the processing season in accordance with the *Limits and Monitoring* section of this permit. (See stations GW015: Sprayfield Site 1 to County Ditch 45, GW016: Sprayfield Site 2 to County Ditch 39, and GW017: Sprayfield Site H to County Ditch 15-2 in the *Limits and Monitoring* section of this permit for monitoring details).

Ground Water Monitoring

The Facility has twelve ground water monitoring wells for monitoring the application of process waste water at the spray fields. Ground water monitoring at the Facility is specified in the *Limits and Monitoring* section of this permit. Sprayfield Site 1 contains seven ground water stations; Sprayfield Site 2 contains five ground water stations. (See stations GW001-GW007, GW009-GW011, GW013 and GW014 in the *Limits and Monitoring* section of this permit for monitoring details.)

Industrial By-Products

The Facility generates several types of Industrial By-Products (IBPs) during the course of vegetable processing and treatment of wastewater, including vegetable screenings from sweet corn and pea processing, sweet corn silage, sweet corn silage leachate; sweet corn silage pressate; and, solids from the on-site system.

Sweet corn silage generated at the Facility is hydraulically pressed and used as animal feed or is land applied. The Facility includes a temporary silage stack located in the Southeast ¼ of Section 19, Township 107 North, Range 22 West, for storage prior to removal to area farmers for feed or when field conditions do not allow for immediate land application. Sweet corn silage leachate and runoff from the stack is collected in a 0.16 MG bentonite-lined lagoon, and is blended with process wastewater at a 1:10 ratio for land treatment via spray irrigation.

Vegetable screenings are materials removed from the wastewater screens; other by-products removed by waste conveyors from the plant. Vegetable screenings are generally used for livestock feed, but may also be stored in the silage stack or disposed of via land application at agronomic rates. The press liquid is generated when sweet corn husks, cobs, and other solid by-products are hydraulically pressed. Prior to land application, the pressate is stored in a 50,000 gallon glass-lined steel tank located outside at the plant. During periods of wet weather, pressate may be transferred to the sweet corn silage leachate lagoon or blended with process wastewater for land application via spray irrigation. The pressed sweet corn silage is either transferred by truck to area farms for livestock feed, hauled to the silage stack for storage, or land applied at agronomic rates. Solids from the wastewater management system may be periodically removed and land applied at agronomic rates during the cropping season.

WS301: Sweet Corn Silage Leachate at a maximum quantity of 1,470,000 gallons per year.
WS302: Sweet Corn Silage at a maximum quantity of 69,053 dry tons per year.
WS303: Wastewater Treatment Solids. This is the pond solids. The approval of the quantity to be land applied will be sent by letter, if needed.
WS304: Vegetable Screenings at a maximum quantity of 2,822 dry tons per year.
WS305: Sweet Corn Silage Pressate at a maximum quantity of 7,516,000

Chemical Additives

The following chemical additives may be used in the wastewater treatment facility.

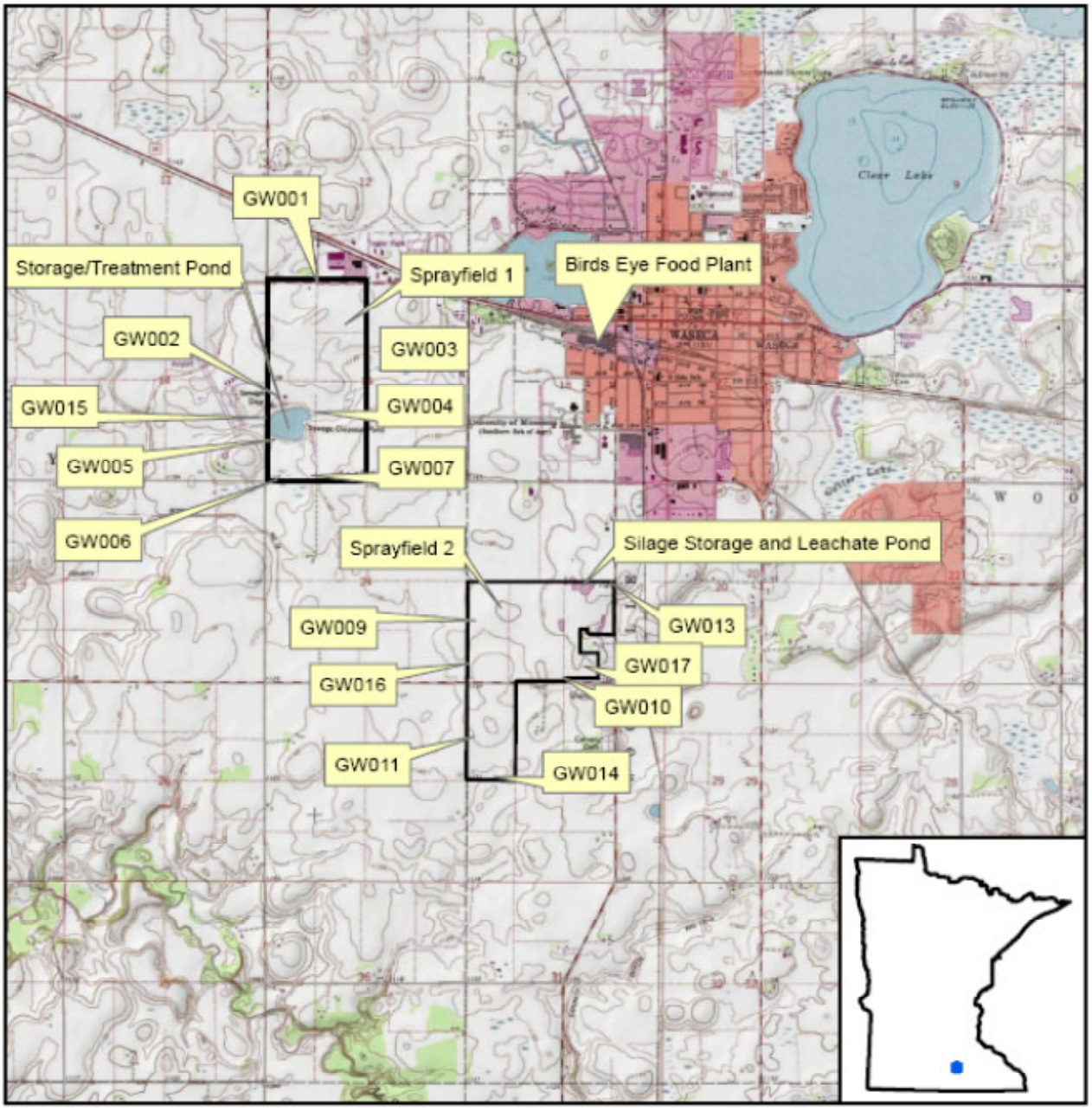
Product Name	Location	Frequency	Average Rate of Use
Formula 1550	Boiler feed water	Continuous	175,750 lbs/year
Formula 1100	Boiler feed water	Continuous	6,435 lbs/year
Formula 159	Boiler feed water	Continuous	6,600 lbs/year
Adjunct LC	Boiler feed water	Continuous	9,075 lbs/year
Formula 44	Steam line water pH	Continuous	5,775 lbs/year
Sulfuric Acid	Condenser water	Continuous	4,666 lbs/year
Formula 315	Condenser water	Continuous	1,920 lbs/year
Formula 2305	Condenser water	Continuous	14,520 lbs/year
Evapokleen	Equip. Cleaning	Continuous	3,226 lbs/year
Quadexx 100	Equip. Cleaning	Once/Day	24,012 lbs/year
Quadexx 200	Equip. Cleaning	Once/Day	11,506 lbs/year
Quadexx 300	Equip. Cleaning	Once/Day	856 lbs/year
Quadexx 400	Equip. Cleaning	Once/Day	448 lbs/year
Quadexx 500	Equip. Cleaning	Once/Day	6,405 lbs/year
Quadexx 700	Equip. Cleaning	Once/Day	28,472 lbs/year
Quadexx 800	Equip. Cleaning	Once/Day	432 lbs/year
Quorum Purple	Equip. Cleaning	Once/Day	11,077 lbs/year
Quorum Clear V	Equip. Cleaning	Once/Day	29,541 lbs/year
SCH Extreme	Sanitation	Once/Day	3,056 lbs/year
Prime	Spray Irrigation	Once/Day	2,216 lbs/year
Cherry Mist	Pond	As needed	1,312 lbs/year
Vortexx	Sanitizer	Once/day	3,895 lbs/year
Sodium Chloride	Water Softener	Regeneration Cycles	175,750 lbs/year
Antifoam 1310	Throughout Plant	As needed	10,768 lbs/year
Boost 3000	Throughout Plant	As needed	5 gal/week
Quadexx 600	Sanitation	Once/day	400 lbs/year
Tsunami 100	Bacterial Control	Once/day	40,104 lbs/year

The location of designated monitoring stations is specified on the "Summary of Stations and Station Locations."

The location of the facility is shown on the "Topographical Map of Permitted Facility."

Topographic Map of Permitted Facility

MN0001686: Birds Eye Foods
T107N, R22W, Section 18
Waseca, Waseca County, Minnesota



Map produced by: MPCA Staff, 05/15/2012
Source: USGS Quad
Scale: 1:45,000

Birds Eye Foods LLC - Waseca
Summary of Stations

DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT

Land Application Stations

Station	Type of Station	Local Name	PLS Location
LA301	Non-biosolids WWT/Sludge Appl Site	B1 (Priebe, Dennis)	SE Quarter of the Section 24, Township 107 North, Range 23 West
LA302	Non-biosolids WWT/Sludge Appl Site	B2 (Priebe, Dennis)	SW Quarter of the SE Quarter of the Section 24, Township 107 North, Range 23 West
LA303	Non-biosolids WWT/Sludge Appl Site	LC-1 (Birds Eye Foods)	SE Quarter of the SW Quarter of the NW Quarter of the Section 19, Township 107 North, Range 22 West
LA304	Non-biosolids WWT/Sludge Appl Site	LC-2 (Agrilink Foods)	SE Quarter of the Section 19, Township 107 North, Range 22 West
LA305	Non-biosolids WWT/Sludge Appl Site	HM-1 (McIntire, Homer)	NW Quarter of the Section 30, Township 107 North, Range 22 West
LA306	Non-biosolids WWT/Sludge Appl Site	HM-2 (McIntire, Homer)	NW Quarter of the Section 30, Township 107 North, Range 22 West
LA307	Non-biosolids WWT/Sludge Appl Site	Doris 1 (Krause, John)	SE Quarter of the Section 6, Township 106 North, Range 22 West
LA308	Non-biosolids WWT/Sludge Appl Site	Doris 2 (Krause, John)	SE Quarter of the Section 6, Township 106 North, Range 22 West
LA309	Non-biosolids WWT/Sludge Appl Site	Drum (Drummer, Andy)	SE Quarter of the Section 12, Township 106 North, Range 23 West
LA310	Non-biosolids WWT/Sludge Appl Site	B-6 (Priebe, Dennis)	SE Quarter of the Section 24, Township 107 North, Range 23 West
LA311	Non-biosolids WWT/Sludge Appl Site	B-2 (Priebe, Dennis)	SE Quarter of the Section 24, Township 107 North, Range 23 West
LA312	Non-biosolids WWT/Sludge Appl Site	B-4 (Priebe, Dennis)	SE Quarter of the Section 24, Township 107 North, Range 23 West
LA313	Non-biosolids WWT/Sludge Appl Site	B-3 (Priebe, Dennis)	SW Quarter of the Section 24, Township 107 North, Range 23 West
LA314	Non-biosolids WWT/Sludge Appl Site	B-4 (Priebe, Dennis)	SE Quarter of the Section 24, Township 107 North, Range 23 West
LA315	Non-biosolids WWT/Sludge Appl Site	B-5 (Priebe, Dennis)	SW Quarter of the Section 24, Township 107 North, Range 23 West
LA316	Non-biosolids WWT/Sludge Appl Site	RW-1 (Wadd, Randy)	NE Quarter of the Section 27, Township 107 North, Range 23 West
LA317	Non-biosolids WWT/Sludge Appl Site	K-1 (Klug, Tom)	NE Quarter of the Section 36, Township 107 North, Range 23 West
LA318	Non-biosolids WWT/Sludge Appl Site	K-2 (Klug, Tom)	SE Quarter of the Section 25, Township 107 North, Range 23 West
LA319	Non-biosolids WWT/Sludge Appl Site	K-3 (Klug, Tom)	SE Quarter of the Section 25, Township 107 North, Range 23 West
LA320	Non-biosolids WWT/Sludge Appl Site	K-4 (Klug, Tom)	SE Quarter of the Section 25, Township 107 North, Range 23 West
LA321	Non-biosolids WWT/Sludge Appl Site	R-1 (Roessler, Richard)	NE Quarter of the Section 29, Township 108 North, Range 22 West
LA322	Non-biosolids WWT/Sludge Appl Site	R-2 (Roessler, Richard)	NE Quarter of the Section 29, Township 108 North, Range 22 West
LA323	Non-biosolids WWT/Sludge Appl Site	RW-2 (Wadd, Randy)	NE Quarter of the Section 27, Township 107 North, Range 23 West
LA324	Non-biosolids WWT/Sludge Appl Site	A-3 (Byron, Don	SW Quarter of the Section 14, Township 107 North, Range 23 West
LA325	Non-biosolids WWT/Sludge Appl Site	A-4 (Byron, Don	SW Quarter of the Section 14, Township 107 North, Range 23 West
LA326	Non-biosolids WWT/Sludge Appl Site	C-1 (Miller, Harold	SE Quarter of the Section 35, Township 108 North, Range 23 West
LA327	Non-biosolids WWT/Sludge Appl Site	D-1 (Keller, James	SW Quarter of the Section 10, Township 107 North, Range 23 West

DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT

Land Application Stations

Station	Type of Station	Local Name	PLS Location
LA328	Non-biosolids WWT/Sludge Appl Site	F-1 (Gray, Charles	SE Quarter of the Section 1, Township 107 North, Range 23 West
LA329	Non-biosolids WWT/Sludge Appl Site	A1 (Byron, Paul	NE Quarter of the SE Quarter of the Section 21, Township 107 North, Range 23 West
LA330	Non-biosolids WWT/Sludge Appl Site	A2 (Byron, Paul	NE Quarter of the SE Quarter of the Section 21, Township 107 North, Range 23 West
LA331	Non-biosolids WWT/Sludge Appl Site	RW3 (Wadd, Randy	NE Quarter of the SW Quarter of the Section 29, Township 107 North, Range 23 West
LA332	Non-biosolids WWT/Sludge Appl Site	B7 (Priebe, Dennis	SW Quarter of the NW Quarter of the Section 24, Township 107 North, Range 23 West
LA333	Non-biosolids WWT/Sludge Appl Site	B8 (Priebe, Dennis	SW Quarter of the NW Quarter of the Section 24, Township 107 North, Range 23 West
LA334	Non-biosolids WWT/Sludge Appl Site	MD 2a (Erwin, Sherman	NW Quarter of the SW Quarter of the Section 3, Township 107 North, Range 22 West
LA335	Non-biosolids WWT/Sludge Appl Site	MD 2b (Erwin, Sherman	NW Quarter of the SE Quarter of the Section 3, Township 107 North, Range 22 West
LA336	Non-biosolids WWT/Sludge Appl Site	MD 3 (Kritzor, Bessie	SW Quarter of the NW Quarter of the Section 4, Township 107 North, Range 21 West
LA337	Non-biosolids WWT/Sludge Appl Site	JK 1a (Arndt, Donald	SW Quarter of the NW Quarter of the NE Quarter of the Section 25, Township 107 North, Range 23 West
LA338	Non-biosolids WWT/Sludge Appl Site	JK 1b (Arndt, Donald	SW Quarter of the NW Quarter of the NE Quarter of the Section 25, Township 107 North, Range 23 West
LA339	Non-biosolids WWT/Sludge Appl Site	K5 a (Klug, Tom	NW Quarter of the SW Quarter of the NW Quarter of the Section 31, Township 107 North, Range 22 West
LA340	Non-biosolids WWT/Sludge Appl Site	RR 3a (Roessler, Richard	NW Quarter of the SE Quarter of the SW Quarter of the Section 28, Township 108 North, Range 22 West
LA341	Non-biosolids WWT/Sludge Appl Site	RR 3b (Roessler, Richard	NW Quarter of the SE Quarter of the SW Quarter of the Section 28, Township 108 North, Range 22 West
LA342	Non-biosolids WWT/Sludge Appl Site	BK 1a (Krause, R)	SW Quarter of the SE Quarter of the SW Quarter of the Section 9, Township 106 North, Range 23 West
LA343	Non-biosolids WWT/Sludge Appl Site	BK 1b (Krause, Richard	SW Quarter of the SE Quarter of the SW Quarter of the Section 9, Township 106 North, Range 23 West
LA344	Non-biosolids WWT/Sludge Appl Site	B3 (Priebe, Dennis	SE Quarter of the SE Quarter of the Section 24, Township 107 North, Range 23 West
LA345	Non-biosolids WWT/Sludge Appl Site	JK2 (Krause, J)	SE Quarter of the SW Quarter of the Section 11, Township 106 North, Range 23 West
LA346	Non-biosolids WWT/Sludge Appl Site	TF1 (Fisher, Tim	SW Quarter of the NW Quarter of the Section 2, Township 107 North, Range 23 West
LA347	Non-biosolids WWT/Sludge Appl Site	B9 (Priebe, Dennis	SW Quarter of the NE Quarter of the Section 24, Township 107 North, Range 23 West
LA348	Non-biosolids WWT/Sludge Appl Site	VF 2a (Flor, David	NE Quarter of the NW Quarter of the Section 8, Township 105 North, Range 22 West
LA349	Non-biosolids WWT/Sludge Appl Site	VF 2b (Flor, David	NE Quarter of the NE Quarter of the Section 8, Township 105 North, Range 22 West
LA350	Non-biosolids WWT/Sludge Appl Site	K5 b (Klug, Tom	NW Quarter of the SW Quarter of the NW Quarter of the Section 31, Township 107 North, Range 22 West
LA351	Application Site, Spray with Soils Tests	Sprayfield Site 1 (Fields A, B/C, D)	NW Quarter of the Section 19, Township 107 North, Range 22 West
LA352	Application Site, Spray with Soils Tests	Sprayfield Site 2 (Fields E/F, G, H)	NW Quarter of the Section 19, Township 107 North, Range 22 West
LA353	Non-biosolids WWT/Sludge Appl Site	BK 1c	South Half of the SW Quarter of the Section 9, Township 106 North, Range 23 West
LA354	Non-biosolids WWT/Sludge Appl Site	EK1a (Krause, E)	West Half of the NW Quarter of the Section 14, Township 106 North, Range 23 West

DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT

Land Application Stations

Station	Type of Station	Local Name	PLS Location
LA355	Non-biosolids WWT/Sludge Appl Site	EK1b (Krause, E)	East Half of the NW Quarter of the Section 14, Township 106 North, Range 23 West
LA356	Non-biosolids WWT/Sludge Appl Site	RZ1 (Zimny, R)	North Half of the NE Quarter of the Section 15, Township 106 North, Range 23 West
LA357	Non-biosolids WWT/Sludge Appl Site	CB1a (Byron, C)	South Half of the NW Quarter of the Section 33, Township 106 North, Range 23 West
LA358	Non-biosolids WWT/Sludge Appl Site	CB1b (Byron, C)	South Half of the NW Quarter of the Section 33, Township 106 North, Range 23 West
LA359	Non-biosolids WWT/Sludge Appl Site	K-7 (Klug, T)	NE Quarter of the SW Quarter of the Section 6, Township 106 North, Range 22 West
LA360	Non-biosolids WWT/Sludge Appl Site	K-8 (Klug, T)	NE Quarter of the SW Quarter of the Section 6, Township 106 North, Range 22 West
LA361	Non-biosolids WWT/Sludge Appl Site	BK 2 (Krause, B)	NW Quarter of the SE Quarter of the Section 2, Township 106 North, Range 23 West
LA362	Non-biosolids WWT/Sludge Appl Site	CB2a (Byron, C)	South Half of the NE Quarter of the Section 32, Township 107 North, Range 23 West
LA363	Non-biosolids WWT/Sludge Appl Site	CB2b (Byron, C)	South Half of the NE Quarter of the Section 32, Township 107 North, Range 23 West
LA364	Non-biosolids WWT/Sludge Appl Site	ER1 (Roesler, E)	NE Quarter of the Section 12, Township 107 North, Range 23 West
LA365	Non-biosolids WWT/Sludge Appl Site	JN1 (Norton, J)	SW Quarter of the NW Quarter of the Section 27, Township 108 North, Range 22 West
LA366	Non-biosolids WWT/Sludge Appl Site	JN2a (Norton, J)	NW Quarter of the SE Quarter of the Section 27, Township 108 North, Range 22 West
LA367	Non-biosolids WWT/Sludge Appl Site	JN2b (Norton, J)	SW Quarter of the SE Quarter of the Section 27, Township 108 North, Range 22 West
LA368	Non-biosolids WWT/Sludge Appl Site	K9 (Ewest, D)	NW Quarter of the NW Quarter of the Section 7, Township 106 North, Range 22 West
LA369	Non-biosolids WWT/Sludge Appl Site	BK 3 (Krause, B)	North Half of the Section 2, Township 106 North, Range 23 West
LA370	Non-biosolids WWT/Sludge Appl Site	BZ1 (Zimmerman, B)	SE Quarter of the NE Quarter of the Section 11, Township 107 North, Range 22 West
LA371	Non-biosolids WWT/Sludge Appl Site	TS 1a (Schue, T)	SW Quarter of the SW Quarter of the Section 7, Township 105 North, Range 22 West
LA372	Non-biosolids WWT/Sludge Appl Site	TS 1b (Schue, T)	SE Quarter of the SW Quarter of the Section 7, Township 105 North, Range 22 West
LA373	Non-biosolids WWT/Sludge Appl Site	JK2 (Krause, J)	NW Quarter of the SE Quarter of the Section 10, Township 106 North, Range 23 West
LA374	Non-biosolids WWT/Sludge Appl Site	JK4a (Krause, J)	North Half of the SE Quarter of the Section 10, Township 106 North, Range 23 West
LA375	Non-biosolids WWT/Sludge Appl Site	JK4b (Krause, J)	North Half of the SE Quarter of the Section 10, Township 106 North, Range 23 West
LA376	Non-biosolids WWT/Sludge Appl Site	BA 1a (Dinse, M)	NE Quarter of the NE Quarter of the Section 17, Township 107 North, Range 21 West
LA377	Non-biosolids WWT/Sludge Appl Site	BA 1b (Dinse, M)	NE Quarter of the NE Quarter of the Section 17, Township 107 North, Range 21 West
LA378	Non-biosolids WWT/Sludge Appl Site	JR1 (Ruody, J)	South Half of the NE Quarter of the Section 24, Township 107 North, Range 22 West
LA379	Non-biosolids WWT/Sludge Appl Site	DR1 - Roesler, D	South Half of the SE Quarter of the Section 31, Township 107 North, Range 22 West
LA380	Non-biosolids WWT/Sludge Appl Site	DR2 - Roesler, D	NE Quarter of the SE Quarter of the Section 31, Township 107 North, Range 22 West
LA381	Non-biosolids WWT/Sludge Appl Site	DR3 - Roesler, D	NW Quarter of the SE Quarter of the Section 31, Township 107 North, Range 22 West

Birds Eye Foods LLC - Waseca
Summary of Stations

DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT

Land Application Stations

Station	Type of Station	Local Name	PLS Location
LA382	Non-biosolids WWT/Sludge Appl Site	BK 2 - Krause, B	NW Quarter of the SE Quarter of the Section 2, Township 106 North, Range 23 West

Waste Stream Stations

Station	Type of Station	Local Name	PLS Location
WS301	Solids to Land Treatment/Application	Silage Leachate to Land Application	NE Quarter of the SW Quarter of the Section 18, Township 107 North, Range 22 West
WS302	Solids to Land Treatment/Application	Sweet Corn Silage to Land Application	NE Quarter of the SW Quarter of the Section 18, Township 107 North, Range 22 West
WS303	Solids to Land Treatment/Application	Wastewater Tx Solids to Land Application	NW Quarter of the Section 19, Township 107 North, Range 22 West
WS304	Solids to Land Treatment/Application	Vegetable Screenings to Land Application	NW Quarter of the Section 19, Township 107 North, Range 22 West
WS305	Solids to Land Treatment/Application	Silage Pressate to Land Application	Section 18, Township 107 North, Range 22 West

Ground Water Stations

Station	Type of Station	Local Name	PLS Location
GW001	Well, Upgradient	Monitoring Well 601 (Site 1)	NW Quarter of Section 13, Township 107 North, Range 23 West
GW002	Well, Downgradient	Monitoring Well 602 (Site 1)	SW Quarter of Section 13, Township 107 North, Range 23 West
GW003	Well, Downgradient	Monitoring Well 603 (Site 1)	SW Quarter of Section 13, Township 107 North, Range 23 West
GW004	Well, Downgradient	Monitoring Well 604 (Site 1)	SW Quarter of Section 13, Township 107 North, Range 23 West
GW005	Well, Downgradient	Monitoring Well 605 (Site 1)	SW Quarter of Section 13, Township 107 North, Range 23 West
GW006	Well, Downgradient	Monitoring Well 606 (Site 1)	SW Quarter of Section 13, Township 107 North, Range 23 West
GW007	Well, Downgradient	Monitoring Well 607 (Site 1)	SW Quarter of Section 13, Township 107 North, Range 23 West
GW009	Well, Downgradient	Monitoring Well 609 (Site 2)	NW Quarter of Section 19, Township 107 North, Range 22 West
GW010	Well, Downgradient	Monitoring Well 610 (Site 2)	SW Quarter of Section 19, Township 107 North, Range 22 West
GW011	Well, Downgradient	Monitoring Well 611 (Site 2)	NW Quarter of Section 30, Township 107 North, Range 22 West
GW013	Well, Upgradient	Monitoring Well 608R (Site 2)	NW Quarter of Section 19, Township 107 North, Range 22 West
GW014	Well, Downgradient	Monitoring Well 612R (Site 2)	NW Quarter of Section 19, Township 107 North, Range 22 West
GW015	Tile Line Monitoring	Sprayfield 1 to County Ditch 45	SW Quarter of Section 13, Township 107 North, Range 23 West
GW016	Tile Line Monitoring	Sprayfield 2 to County Ditch 39	SE Quarter of Section 24, Township 107 North, Range 23 West
GW017	Tile Line Monitoring	Sprayfield 2 to County Ditch 15-2	SE Quarter of Section 19, Township 107 North, Range 23 West

Waste Stream Stations

Station	Type of Station	Local Name	PLS Location
WS001	Intermediate: WW to Land	Process Wastewater to Spray Irrigation	SW Quarter of Section 13, Township 107 North, Range 23 West

Birds Eye Foods LLC - Waseca
Limits and Monitoring Requirements

DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT

The Permittee shall comply with the limits and monitoring requirements as specified below.

GW 001, GW 013

Parameter	Limit	Units	Limit Type	Effective Period	Sample Type	Frequency	Notes
Chloride, Total	Monitor Only	mg/L	Single Value	Apr-Nov	Grab	1 x Month	9
Elevation of GW Relative to Mean Sea Level	Monitor Only	feet	Single Value	Apr-Nov	Measurement, Instantaneous	1 x Month	14
Nitrite Plus Nitrate, Total (as N)	Monitor Only	mg/L	Single Value	Apr-Nov	Grab	1 x Month	9
Nitrogen, Ammonia, Total (as N)	Monitor Only	mg/L	Single Value	Apr-Nov	Grab	1 x Month	1
Nitrogen, Kjeldahl, Total	Monitor Only	mg/L	Single Value	Apr-Nov	Grab	1 x Month	9
pH, Field	Monitor Only	SU	Single Value	Apr-Nov	Grab	1 x Month	1
Solids, Total Dissolved (TDS)	Monitor Only	mg/L	Single Value	Apr-Nov	Grab	1 x Month	9
Specific Conductance, Field	Monitor Only	umh/cm	Single Value	Apr-Nov	Grab	1 x Month	9
Temperature, Water (C)	Monitor Only	Deg C	Single Value	Apr-Nov	Grab	1 x Month	1

GW 002, GW 003, GW 004, GW 005, GW 006, GW 007, GW 009, GW 010, GW 011, GW 014

Parameter	Limit	Units	Limit Type	Effective Period	Sample Type	Frequency	Notes
Chloride, Total	250	mg/L	Instantaneous Maximum Intervention	Apr-Nov	Grab	1 x Month	7
Elevation of GW Relative to Mean Sea Level	Monitor Only	feet	Single Value	Apr-Nov	Measurement, Instantaneous	1 x Month	14
Nitrite Plus Nitrate, Total (as N)	2.5	mg/L	Instantaneous Maximum Intervention	Apr-Nov	Grab	1 x Month	7
Nitrogen, Ammonia, Total (as N)	Monitor Only	mg/L	Single Value	Apr-Nov	Grab	1 x Month	1
Nitrogen, Kjeldahl, Total	Monitor Only	mg/L	Single Value	Apr-Nov	Grab	1 x Month	9
pH, Field	Monitor Only	SU	Single Value	Apr-Nov	Grab	1 x Month	1
Solids, Total Dissolved (TDS)	Monitor Only	mg/L	Instantaneous Maximum Intervention	Apr-Nov	Grab	1 x Month	9
Specific Conductance, Field	Monitor Only	umh/cm	Single Value	Apr-Nov	Grab	1 x Month	9
Temperature, Water (C)	Monitor Only	Deg C	Single Value	Apr-Nov	Grab	1 x Month	1

GW 015, GW 016, GW 017

Parameter	Limit	Units	Limit Type	Effective Period	Sample Type	Frequency	Notes
BOD, Carbonaceous 05 Day (20 Deg C)	Monitor Only	mg/L	Calendar Month Average	May-Oct	Grab	1 x Week	5
BOD, Carbonaceous 05 Day (20 Deg C)	25	mg/L	Calendar Month Max Intervention Limit	May-Oct	Grab	1 x Week	6
Nitrite Plus Nitrate, Total (as N)	Monitor Only	mg/L	Calendar Month Average	May-Oct	Grab	1 x Week	5
Nitrite Plus Nitrate, Total (as N)	Monitor Only	mg/L	Calendar Month Maximum	May-Oct	Grab	1 x Week	5

Birds Eye Foods LLC - Waseca
Limits and Monitoring Requirements

DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT

The Permittee shall comply with the limits and monitoring requirements as specified below.

GW 015, GW 016, GW 017

Parameter	Limit	Units	Limit Type	Effective Period	Sample Type	Frequency	Notes
Nitrogen, Ammonia, Total (as N)	Monitor Only	mg/L	Calendar Month Average	May-Oct	Grab	1 x Week	5
Nitrogen, Ammonia, Total (as N)	4	mg/L	Calendar Month Max Intervention Limit	May-Oct	Grab	1 x Week	6
Phosphorus, Total (as P)	Monitor Only	mg/L	Calendar Month Average	May-Oct	Grab	1 x Week	5
Phosphorus, Total (as P)	Monitor Only	mg/L	Calendar Month Maximum	May-Oct	Grab	1 x Week	5

LA 301, LA 302, LA 303, LA 304, LA 305, LA 306, LA 307, LA 308, LA 309, LA 310, LA 311, LA 312, LA 313, LA 314, LA 315, LA 316, LA 317, LA 318, LA 319, LA 320, LA 321, LA 322, LA 323, LA 324, LA 325, LA 326, LA 327, LA 328, LA 329, LA 330, LA 331, LA 332, LA 333, LA 334, LA 335, LA 336, LA 337, LA 338, LA 339, LA 340, LA 341, LA 342, LA 343, LA 344, LA 345, LA 346, LA 347, LA 348

Parameter	Limit	Units	Limit Type	Effective Period	Sample Type	Frequency	Notes
Organic Matter, Total In Soil	Monitor Only	%	Single Value	Sep-Aug	Composite	1 x Year	13
pH	Monitor Only	SU	Single Value	Sep-Aug	Composite	1 x Year	13
Phosphorus, BRAY-1 Ext In Soil	200	ppm	Single Value	Sep-Aug	Composite	1 x Year	15
Phosphorus, Olson Ext in Soil	180	ppm	Single Value	Sep-Aug	Composite	1 x Year	15
Potassium, NH4AC, Exch In Soil	Monitor Only	ppm	Single Value	Sep-Aug	Composite	1 x Year	13
Salts, Water Soluble In Soil	4	mmh/cm	Single Value	Sep-Aug	Composite	1 x Year	13

LA 349, LA 350, LA 353, LA 354, LA 355, LA 356, LA 357, LA 358, LA 359, LA 360, LA 361, LA 362, LA 363, LA 364, LA 365, LA 366, LA 367, LA 368, LA 369, LA 370, LA 371, LA 372, LA 373, LA 374, LA 375, LA 376, LA 377, LA 378

Parameter	Limit	Units	Limit Type	Effective Period	Sample Type	Frequency	Notes
Organic Matter, Total In Soil	Monitor Only	%	Single Value	Sep-Aug	Composite	1 x Year	13
pH	Monitor Only	SU	Single Value	Sep-Aug	Composite	1 x Year	13
Phosphorus, BRAY-1 Ext In Soil	200	ppm	Single Value	Sep-Aug	Composite	1 x Year	15
Phosphorus, Olson Ext in Soil	180	ppm	Single Value	Sep-Aug	Composite	1 x Year	15
Potassium, NH4AC, Exch In Soil	Monitor Only	ppm	Single Value	Sep-Aug	Composite	1 x Year	13
Salts, Water Soluble In Soil	4	mmh/cm	Single Value	Sep-Aug	Composite	1 x Year	13

LA 351

Parameter	Limit	Units	Limit Type	Effective Period	Sample Type	Frequency	Notes
Area Of Disposal, Used	241	acres	Instantaneous Maximum	Jan-Dec	Measurement	1 x Year	3
Crop Yield	Monitor Only	ton/ac	Single Value	Jan-Dec	Estimate	1 x Year	11
Flow Application Rate	85	MG/yr	Calendar Year Total	Jan-Dec	Calculation	1 x Year	8
Nitrogen, Total Annual Loading Rate	300	lbacyr	Calendar Year Total Intervention	Jan-Dec	Calculation	1 x Year	4

Birds Eye Foods LLC - Waseca
Limits and Monitoring Requirements

DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT

The Permittee shall comply with the limits and monitoring requirements as specified below.

LA 351

Parameter	Limit	Units	Limit Type	Effective Period	Sample Type	Frequency	Notes
Organic Matter, Total In Soil	Monitor Only	%	Single Value	Jan-Dec	Composite	1 x Year	12
pH, 1 To 1 Soil To Water	Monitor Only	SU	Single Value	Jan-Dec	Composite	1 x Year	12
Phosphorus, BRAY-1 Ext In Soil	Monitor Only	lb/acr	Single Value	Jan-Dec	Composite	1 x Year	12
Potassium, NH4AC, Exch In Soil	Monitor Only	lb/acr	Single Value	Jan-Dec	Composite	1 x Year	12
Protein, Crop, Crude	Monitor Only	%	Single Value	Jan-Dec	Grab	1 x Year	11
Salts, Water Soluble In Soil	3.0	mmh/cm	Instantaneous Maximum Intervention	Jan-Dec	Composite	1 x Year	12

LA 352

Parameter	Limit	Units	Limit Type	Effective Period	Sample Type	Frequency	Notes
Area Of Disposal, Used	262	acres	Instantaneous Maximum	Jan-Dec	Measurement	1 x Year	3
Crop Yield	Monitor Only	ton/ac	Single Value	Jan-Dec	Estimate	1 x Year	11
Flow Application Rate	75.4	MG/yr	Calendar Year Total	Jan-Dec	Calculation	1 x Year	8
Nitrogen, Total Annual Loading Rate	300	lbacyr	Calendar Year Total Intervention	Jan-Dec	Calculation	1 x Year	4
Organic Matter, Total In Soil	Monitor Only	%	Single Value	Jan-Dec	Composite	1 x Year	12
pH, 1 To 1 Soil To Water	Monitor Only	SU	Single Value	Jan-Dec	Composite	1 x Year	12
Phosphorus, BRAY-1 Ext In Soil	Monitor Only	lb/acr	Single Value	Jan-Dec	Composite	1 x Year	12
Potassium, NH4AC, Exch In Soil	Monitor Only	lb/acr	Single Value	Jan-Dec	Composite	1 x Year	12
Protein, Crop, Crude	Monitor Only	%	Single Value	Jan-Dec	Grab	1 x Year	11
Salts, Water Soluble In Soil	3.0	mmh/cm	Instantaneous Maximum Intervention	Jan-Dec	Composite	1 x Year	12

WS 001

Parameter	Limit	Units	Limit Type	Effective Period	Sample Type	Frequency	Notes
Area Of Disposal, Used	503	acres	Single Value	Jan-Dec	Measurement	1 x Year	
BOD, 05 Day (20 Deg C)	Monitor Only	mg/L	Calendar Month Average	Apr-Nov	24-Hour Flow Composite	1 x Week	
BOD, 05 Day (20 Deg C)	Monitor Only	mg/L	Calendar Month Maximum	Apr-Nov	24-Hour Flow Composite	1 x Week	
Calcium, Total (as Ca)	Monitor Only	mg/L	Calendar Month Average	Apr-Nov	24-Hour Flow Composite	1 x Week	
Calcium, Total (as Ca)	Monitor Only	mg/L	Calendar Month Maximum	Apr-Nov	24-Hour Flow Composite	1 x Week	
Chloride, Total	Monitor Only	mg/L	Calendar Month Average	Apr-Nov	24-Hour Flow Composite	1 x Week	

Birds Eye Foods LLC - Waseca
Limits and Monitoring Requirements

DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT

The Permittee shall comply with the limits and monitoring requirements as specified below.

WS 001

Parameter	Limit	Units	Limit Type	Effective Period	Sample Type	Frequency	Notes
Flow	Monitor Only	MG	Calendar Month Total	Apr-Nov	Measurement	1 x Day	
Flow	160.4	mgd	Calendar Year To Date Total	Apr-Nov	Measurement	1 x Day	
Magnesium, Total (as Mg)	Monitor Only	mg/L	Calendar Month Average	Apr-Nov	24-Hour Flow Composite	1 x Week	
Magnesium, Total (as Mg)	Monitor Only	mg/L	Calendar Month Maximum	Apr-Nov	24-Hour Flow Composite	1 x Week	
Nitrogen, Ammonia, Total (as N)	Monitor Only	mg/L	Calendar Month Average	Apr-Nov	24-Hour Flow Composite	1 x Week	
Nitrogen, Ammonia, Total (as N)	Monitor Only	mg/L	Calendar Month Maximum	Apr-Nov	24-Hour Flow Composite	1 x Week	
Nitrogen, Kjeldahl, Total	Monitor Only	mg/L	Calendar Month Average	Apr-Nov	24-Hour Flow Composite	1 x Week	
Nitrogen, Kjeldahl, Total	Monitor Only	mg/L	Calendar Month Maximum	Apr-Nov	24-Hour Flow Composite	1 x Week	
Nitrogen, Nitrate, Total (as N)	Monitor Only	mg/L	Calendar Month Average	Apr-Nov	24-Hour Flow Composite	1 x Week	
Nitrogen, Nitrate, Total (as N)	Monitor Only	mg/L	Calendar Month Maximum	Apr-Nov	24-Hour Flow Composite	1 x Week	
pH	Monitor Only	SU	Calendar Month Maximum	Apr-Nov	Grab	1 x Week	2
pH	Monitor Only	SU	Calendar Month Minimum	Apr-Nov	Grab	1 x Week	2
Sodium Adsorption Ratio (SAR)	8.5	ratio	Calendar Month Average Intervention	Apr-Nov	Calculation	1 x Week	
Sodium, Total (as Na)	Monitor Only	mg/L	Calendar Month Average	Apr-Nov	24-Hour Flow Composite	1 x Week	
Sodium, Total (as Na)	Monitor Only	mg/L	Calendar Month Maximum	Apr-Nov	24-Hour Flow Composite	1 x Week	
Solids, Total Dissolved (TDS)	Monitor Only	mg/L	Calendar Month Average	Apr-Nov	24-Hour Flow Composite	1 x Week	
Solids, Total Dissolved (TDS)	Monitor Only	mg/L	Calendar Month Maximum	Apr-Nov	24-Hour Flow Composite	1 x Week	
Specific Conductance	Monitor Only	umh/cm	Calendar Month Maximum	Apr-Nov	Grab	1 x Week	2

WS 301, WS 303, WS 304, WS 305

Parameter	Limit	Units	Limit Type	Effective Period	Sample Type	Frequency	Notes
Chloride, Dry Weight (as Cl)	Monitor Only	mg/kg	Single Value	Sep-Aug	Composite	1 x Year	10
Nitrogen, Ammonia, Dry Weight	Monitor Only	%	Single Value	Sep-Aug	Composite	1 x Year	10
Nitrogen, Kjeldahl, Total, Solid Fraction, Dry Weight	Monitor Only	%	Single Value	Sep-Aug	Composite	1 x Year	10
Oil & Grease, Total	Monitor Only	mg/kg	Single Value	Sep-Aug	Composite	1 x Year	10
pH, Sludge	Monitor Only	SU	Single Value	Sep-Aug	Composite	1 x Year	10
Phosphorus, Total, Dry Weight (as P)	Monitor Only	%	Single Value	Sep-Aug	Composite	1 x Year	10
Sodium, Dry Weight (as Na)	Monitor Only	mg/kg	Single Value	Sep-Aug	Composite	1 x Year	10

DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT

The Permittee shall comply with the limits and monitoring requirements as specified below.

WS 301, WS 303, WS 304, WS 305

Parameter	Limit	Units	Limit Type	Effective Period	Sample Type	Frequency	Notes
Sodium, Total (as Na)	170	lbacyr	Single Value	Sep-Aug	Composite	1 x Year	10
Solids, Total	Monitor Only	%	Single Value	Sep-Aug	Composite	1 x Year	10
Solids, Total Volatile, Percent of Total	Monitor Only	%	Single Value	Sep-Aug	Composite	1 x Year	10

Notes:
1 -- Analyze immediately. Monitoring wells shall be sampled in accordance with "Minnesota Pollution Control Agency, Water Quality Division: Sampling Protocol for Ground Water Monitoring Wells, July 1997," Triplett, et. al.
2 -- Analyze in the field, within one hour of sample collection.
3 -- As measure of acreage to which waste is applied.
4 -- Calculate as flow-weighted sum of total annual mass Kjeldahl nitrogen and nitrate-plus-nitrite nitrogen applied to site, divided by the acreage of the site. Limit applies to the sum of all sources of nitrogen applied to the site.
5 -- During periods of wastewater or waste application to the site, and beginning at least two weeks before this flow starts, and continuing at least two weeks after this flow ends.
6 -- During periods of wastewater or waste application to the site, and beginning at least two weeks before this flow starts, and continuing at least two weeks after this flow ends. If reported value exceeds listed intervention limit, refer to permit Chapter 4.
7 -- If background water quality exceeds the intervention limit, the intervention limit shall be the same as the background concentration. Monitoring wells shall be sampled in accordance with "Minnesota Pollution Control Agency, Water Quality Division: Sampling Protocol for Ground Water Monitoring Wells, July 1997," Triplett, et. al.
8 -- Monitor the volume of wastewater that is reclaimed and reapplied to the sprayfield and report this value in the Annual Report.
9 -- Monitoring wells shall be sampled in accordance with "Minnesota Pollution Control Agency, Water Quality Division: Sampling Protocol for Ground Water Monitoring Wells, July 1997," Triplett, et. al.
10 -- Refer to Table 2 of the 'Tables for Industrial By-Products Chapter' appendix of this permit to determine the minimum frequency of analysis for these analytes. Samples must be representative of the industrial by-product land applied, and in some cases, the minimum frequencies of analysis will not be adequate to achieve a representative sample. In this case, additional analysis may be required.
11 -- Report the date each time a crop is harvested. If a crop is harvested more than once during the growing season, this characteristic shall be determined for each cutting.
12 -- Sample before irrigation or application of commercial or other supplemental fertilizer. The composite shall consist of a mixture of 15-20 subsamples taken from a 0 to 8-inch core. At least one composite sample shall be collected for each 40 acres.
13 -- Soil testing must be conducted on each site that is used for land application before the site is used for the first time and once every three years a site is used. The composite sample shall consist of a mixture of 15-20 sub-samples taken in the plow layer for every 40 acres.
14 -- The elevation (feet above mean sea level) of the inner casing of all monitoring wells shall be surveyed in feet to the nearest 1/100th of a foot.
15 -- The soil test method used for extractable phosphorus in soil is either the Bray P-1 test, or the Olson test; the Olson procedure should be used if the soil pH is 7.4 or higher. Soil testing must be conducted on each site that is used for land application before the site is used for the first time and once every three years a site is used. The composite sample shall consist of a mixture of 15-20 sub-samples taken in the plow layer for every 40 acres.

Chapter 1. Ground Water Stations

1. Special Requirements

Ground Water Monitoring Well Evaluation

1.1 The Permittee shall complete a Ground Water Monitoring Well Evaluation for Sprayfield 2 within the first year following permit issuance.

1.2 The Ground Water Monitoring Well Evaluation for Sprayfield 2 shall include, but not be limited to the following:

a. Prepare monthly ground water contour maps for one year;
b. resurvey all ground water well casing elevations;
c. evaluate potential causes for the nitrogen exceedances at GW009.

1.3 The Permittee shall submit a Ground Water Monitoring Well Evaluation Report 60 days following the one year Ground Water Monitoring Evaluation of Sprayfield 2.

2. Monitoring Wells

2.1 The Permittee shall install, maintain and abandon groundwater monitoring wells according to the Minnesota Water Well Construction Code, Minnesota Rules, ch. 4725. Damaged or improperly constructed monitoring wells shall be repaired or properly abandoned and replaced. Information on licensed water well contractors is available from the Minnesota Department of Health.

2.2 The Permittee shall submit a detailed monitoring well log for each monitoring well at the facility and a detailed US Geological Survey topographical map identifying the location of each well.

2.3 Each monitoring well shall be clearly numbered on the outside of the well with either indelible paint or an inscribed number.

DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT

Chapter 1. Ground Water Stations

2. Monitoring Wells

2.4 The monitoring wells shall be sampled in accordance with "Minnesota Pollution Control Agency, Water Quality Division: Sampling Protocol for Ground Water Monitoring Wells, July 1997," Triplett, et. al. Copies of this publication are available on the internet at http://www.pca.state.mn.us/water/groundwater/wqsampling.html or may be obtained from the MPCA by calling 651-282-6143 or 800-657-3938.

2.5 Prior to well purging and sampling, depths to groundwater shall be measured to the nearest 0.01 foot below the top of the well casing, and groundwater elevations shall be reported to the nearest 0.01 foot above mean sea level.

2.6 Temperature, specific conductance and pH shall be reported as the final field measurements from well stabilization.

3. Discharges From Tile Lines

3.1 The Permittee shall begin sampling at the frequencies noted two weeks prior to wastewater or waste application to the site, during periods of application, and continuing for two weeks after waste application ends.

4. Requirements for Specific Stations

4.1 GW 001, GW 002, GW 003, GW 004, GW 005, GW 006, GW 007, GW 009, GW 010, GW 011, GW 013, GW 014, GW 015, GW 016, GW 017: Submit a monthly DMR monthly by 21 days after the end of each calendar month following permit issuance.

Chapter 2. Waste Stream Stations

1. Requirements for Specific Stations

1.1 WS 001: Submit a monthly DMR monthly by 21 days after the end of each calendar month following permit issuance.

2. Sampling Location

2.1 Samples for Station WS001 shall be taken at a point representative of the total discharge to the spray irrigation sites.

3. Sampling Frequency

3.1 Sampling is required only during periods of discharge to the irrigation site. If there is no discharge during the reporting period, the Permittee shall check the "No Discharge" box on the Discharge Monitoring Report (DMR).

Chapter 3. Industrial Process Wastewater

1. Prohibited Discharges

1.1 This permit does not authorize the discharge of sewage, wash water, scrubber water, spills, oil, hazardous substances, or equipment/vehicle cleaning and maintenance wastewaters to ditches, wetlands or other surface waters of the state.

1.2 The Permittee shall prevent the routing of pollutants from the facility to a municipal wastewater treatment system in any manner unless authorized by the pretreatment standards of the MPCA and the municipal authority.

1.3 The Permittee shall not transport pollutants to a municipal wastewater treatment system that will interfere with the operation of the treatment system or cause pass-through violations of effluent limits or water quality standards.

Chapter 3. Industrial Process Wastewater

2. Toxic Substance Reporting

2.1 The Permittee shall notify the MPCA immediately of any knowledge or reason to believe that an activity has occurred that would result in the discharge of a toxic pollutant listed in Minnesota Rules, pt. 7001.1060, subp. 4 to 10 or listed below that is not limited in the permit, if the discharge of this toxic pollutant has exceeded or is expected to exceed the following levels:

a. for acrolein and acrylonitrile, 200 ug/L;

b. for 2,4-dinitrophenol and 2-methyl-4,6-dinitrophenol, 500 ug/L;

c. for antimony, 1mg/L;

d. for any other toxic pollutant listed in Minnesota Rules, pt. 7001.1060, subp. 4 to 10, 100 ug/L; or

e. five times the maximum concentration value identified and reported for that pollutant in the permit application. (Minnesota Rules, pt. 7001.1090, subp. 2.A)

2.2 The Permittee shall notify the MPCA immediately if the Permittee has begun or expects to begin to use or manufacture as an intermediate or final by-product a toxic pollutant that was not reported in the permit application under Minnesota Rules, pt. 7001.1050, subp. 2.J. (Minnesota Rules, pt. 7001.1090, subp. 2.B)

Chapter 4. Industrial Spray Irrigation

1. Authorization

1.1 This chapter authorizes the Permittee to apply process wastewater, as described in the 'Facility Description' section of this permit, to land application sites using a spray irrigation system. This activity is limited by the 'Limits and Monitoring' section of this permit, as well as the other terms and conditions of this permit.

2. Site Management, Limitations, and Restrictions

Site Selection and Use Procedure

2.1 Prior to the use of a site for the spray irrigation of industrial wastewater for the first time, the Permittee shall obtain written MPCA approval for such use.

2.2 The Permittee is responsible for determining that the site meets the limitations identified for Land Application Stations in the 'Limits and Monitoring' section of this permit.

Hydraulic Loading Rates

Chapter 4. Industrial Spray Irrigation

2. Site Management, Limitations, and Restrictions

2.3 Hydraulic loading rate limits are set to prevent ponding and runoff from land application sites. The limitations specified in this part shall not cause any other application limits of this chapter or the 'Limits and Monitoring' section of this permit to be exceeded.

All of the following limitations apply to the spray irrigation of industrial wastewater:

a. No runoff of industrial wastewater from the application site is allowed.

b. Industrial wastewater application shall be limited to prevent the runoff of any industrial wastewater mixed with rain water.

c. Industrial wastewater may not be sprayed during any rainfall event that causes runoff from the site.

d. Uncontaminated storm water may be allowed to drain from a spray irrigation field.

e. Industrial wastewater shall not be applied when the cover crop is dormant as a result of frost or below freezing temperatures.

Miscellaneous Management Practices/Restrictions

2.4 All of the following standards apply to the spray irrigation of industrial wastewater.

a. The Permittee shall operate each spray field in a load and rest cycle. The discharge shall be evenly distributed to individual sections of the spray field and allow for sufficient resting periods to maintain the absorptive capacity of the soil.

b. The spray irrigation system cover crop shall be cut and removed at least twice a year to stimulate growth of vegetation and to remove nutrients from the system. If forage crops are grown, a crop survey must be conducted by a crop expert to determine the percent of all predominant varieties, percent broad leaves, and percent other grasses.

c. The discharge of industrial waste water to any authorized land application site shall not have physical or chemical characteristics that prevent the proper operation of the land disposal system. The discharge shall be free of material that interferes with the operation of spray nozzles or orifices.

d. The Permittee shall develop a process control test or method to determine the potential to exceed the five-day carbonaceous biochemical oxygen demand (CBOD5) limit of 25 milligrams per liter for tile line discharges.

e. The Permittee shall conduct a visual inspection of each tile line discharge at least once per day for changes that indicate a potential exceedance of a tile line limit or intervention limit. The daily tile line discharge observations shall be documented in accordance with the 'Records' part of this chapter.

Chapter 4. Industrial Spray Irrigation

2. Site Management, Limitations, and Restrictions

2.5 Nuisance Conditions. Spray irrigation of wastewater shall be performed so as to minimize adverse effects resulting from odors, noise and aerosol drift. The permittee shall provide reasonable assurance that the land application of wastewater will not cause nuisance conditions. Operational and structural controls, or some combination thereof, may be considered in providing reasonable assurance, and shall be specified in the facility's Sprayfield Management Plan, as required by part 4.1 and described by part 4.4, respectively, of this chapter.

Operational controls include methods such as timing spraying to minimize inconvenience to neighboring residents and to minimize the potential for human contact; and, increasing setback distances. Structural controls include methods such as innovative structural design; use of a weather station with an anemometer; the use of drop nozzle irrigation to minimize spray drift toward public land or access ways; and, aeration.

In the event that the measures or equipment intended to create reasonable assurance no longer function as intended, corrective action (which may include additional maintenance or modifications of the treatment system) shall be taken by the Permittee. The Permittee shall submit a written description of the corrective actions taken to eliminate the nuisance conditions to the MPCA within five (5) days of discovery of the incident. Other corrective action may be required by the Commissioner, as necessary to comply with the requirements of this part.

3. Operator Certification

3.1 All industrial spray irrigation activities must be done by or under the supervision of a Type V certified operator.

3.2 The Permittee shall employ at least one Type V operator as required in Minn. R. 7048.0500, subp. 1, on site at the Permittee's operations, who will be responsible for the day-to-day operations of the wastewater treatment disposal system.

4. Land Application Sprayfield Management Plan

4.1 To address the specific operations of the spray irrigation fields; optimize the performance of the treatment system; and, to maintain compliance with Minn. Stat. chs. 115 and 116, as amended, and Minn. R. chs. 7001, 7050, 7053 and 7060, the Permittee shall prepare and implement an approved Sprayfield Management Plan. Submit a Sprayfield Management Plan by 60 days after permit issuance.

4.2 If the MPCA has not responded to the plan within 60 days of its receipt with comments or requested changes to the plan, the submitted plan will become the facility's operating Sprayfield Management Plan.

If the MPCA determines that the operating Sprayfield Management Plan is not effective in preventing permit violations, the Permittee may be required by the MPCA to revise their Sprayfield Management Plan.

4.3 Changes or updates to the Sprayfield Management Plan made by the Permittee shall be submitted to the MPCA with the Industrial Spray Irrigation Annual Report, as described in the 'Annual Report' part of this chapter.

Chapter 4. Industrial Spray Irrigation

4. Land Application Sprayfield Management Plan

4.4 The Sprayfield Management Plan shall include the following elements, at a minimum:

a. Facility information, to include the following:

i. Sprayfield facility description and maps;

ii. Locations of all monitoring locations, such as tile discharges, monitoring wells, etc.; and,

iii. General description of sprayfield operation.

b. A description of the management of process waste water application, including the following:

i. Irrigation scheduling (daily, monthly, annually);

ii. Irrigation intensity;

iii. Loading rates (hydraulic and nutrient);

iv. Load/rest cycle;

v. Runoff collection, if applicable;

vi. Drain tile discharge or collection, if applicable;

vii. Process control or test method for tile line discharges required by the Limits and Monitoring section of this permit, and,

viii. Soil-moisture monitoring system.

c. A description of crop management practices, as described by subpart 5 of this part.

d. Identify areas susceptible to runoff and identify management practices to prevent and control runoff.

e. Description of the inspection and maintenance program for pipe line breaks and associated irrigation equipment, as required by subpart 3 of the 'Facilities Operation' part of this chapter.

f. A 'Spill Prevention and Response Procedure', as described by subpart 7 of this part.

g. A 'Contingency Plan', as described by subpart 8 of this part.

h. A 'Monitoring Plan', as described by subpart 9 of this part.

i. A 'Ground Water Monitoring Plan', as described by subpart 10 of this part, if ground water monitoring is required by the 'Compliance Monitoring' part of this chapter, or by another chapter in this permit.

Chapter 4. Industrial Spray Irrigation

4. Land Application Sprayfield Management Plan

4.5 The description of crop management practices shall include at least the following elements:

a. List of cover crop type(s);

b. Description of crop establishment and maintenance procedures;

c. Schedule for crop harvest and removal;

d. Description of the methods for measuring crop yield; and,

e. Methods for conducting the crop survey required by the Limits and Monitoring section of this permit.

4.6 A 'Spill Prevention and Response Procedure' shall be prepared and implemented, and shall include the following elements, at a minimum:

a. Identification of where spills have occurred and where they have the potential to occur;

b. Determination and identification of drainage points for potential spill areas, and develop appropriate spill prevention and containment measures for these areas;

c. Detailed description of procedures for notifying state, local, and company personnel in the event of a spill shall be developed and made available to appropriate personnel;

d. Detailed procedures for containing and cleaning up spills shall be developed and made available to appropriate personnel;

e. A list of all spill control equipment including the equipment location; and,

f. An employee training program to inform appropriate personnel of notification and spill response procedures.

4.7 A 'Contingency Plan' for managing the spray irrigation system during time periods when irrigation is not possible due to adverse climatic conditions, equipment failure, or in the event the management requirements of subpart(s) 3 and/or 4 of the 'Site Management, Limitations and Restrictions' part of this chapter are violated, shall be prepared and implemented.

The plan should include alternatives such as:

a. Storage tanks or lagoons;

b. Additional land;

c. Set-aside corners or other unused parcels of land;

d. Transporting processed wastewater;

e. Processing shutdown; and,

f. Treatment facilities.

Chapter 4. Industrial Spray Irrigation

4. Land Application Sprayfield Management Plan

4.8 A 'Monitoring Plan' shall be prepared and implemented, and shall contain the following information, at a minimum:

a. Sampling point identification;

b. Sampling protocol for all monitoring points:

c. Sampling schedule;

d. List of parameters to be analyzed;

e. Standard test methods; and,

f. Reporting limits.

4.9 A 'Groundwater Monitoring Plan' shall be prepared and implemented, and shall include the following elements, at a minimum:

a. Maps of spray fields, monitoring well locations, and water table contour map(s) illustrating groundwater flow direction;

b. A description of site hydrogeology and soils, including well and boring logs, and cross sections);

c. A residential well survey (one-mile radius) including well depth and aquifer information; and,

d. A description of monitoring well sampling procedures. If monitoring wells are sampled by a contractor, a copy of their procedures and quality assurance program shall be provided as part of the 'Groundwater Monitoring Plan'. Refer to the MPCA publication, "Sampling Procedures for Ground Water Monitoring Wells" (July 1997), for further information.

5. Facilities Operation

5.1 A 'Maintenance Plan' to eliminate water quality degradation shall be prepared. The Permittee shall operate the disposal system in accordance with this plan, as approved by the MPCA.

5.2 The Permittee shall at all times maintain in good working order and operate as efficiently as possible all facilities or systems of control installed or used to achieve compliance with the terms and conditions of this permit.

Proper operation and maintenance includes effective performance; adequate funding; adequate operator staffing and training; and, adequate laboratory and process controls, including appropriate quality assurance procedures.

5.3 The Permittee is responsible for insuring system reliability and shall install leak detection equipment and/or implement routine inspection and maintenance programs to prevent pipe line breaks and other associated equipment failures that may endanger human health, public drinking water supplies or the environment. The Permittee shall maintain a record of all inspections, maintenance, and tests conducted, and these records shall be made available to the MPCA upon request.

5.4 Maintenance of the treatment facility that results in impairment of treatment efficiency of the disposal system and/or degradation of water quality shall be scheduled as much as possible during non-critical water quality periods and shall be carried out in a manner approved by the MPCA.

5.5 Necessary in-plant control tests shall be conducted at a frequency adequate to ensure continuous efficient operation of the treatment facility.

Chapter 4. Industrial Spray Irrigation

5. Facilities Operation

5.6 The Permittee shall provide an adequate operating staff which is duly qualified under Minn. R. ch. 9400 and, if applicable, as determined by the MPCA pursuant to Minn. R. 7001.0150, to carry out the operation, maintenance and testing functions required to insure compliance with the conditions of this permit.

6. Compliance Responsibility

Exceedance of a Tile Line Discharge Limit for CBOD5

6.1 If there is an exceedance of a tile line intervention limit of 25 mg/l for five-day carbonaceous biochemical oxygen demand (CBOD5) in a tile line discharge, the Permittee shall take the following actions:

a. Notify the MPCA within 24 hours of discovering the exceedance.

b. Immediately discontinue the discharge from the affected tile line until limits can be met.

c. If the tile line discharge cannot be discontinued, the Permittee shall monitor the receiving water once per day above and below the point where the tile line discharge enters the receiving water for: dissolved oxygen, total ammonia-nitrogen, chemical oxygen demand, five-day carbonaceous biochemical oxygen demand (CBOD5), specific conductance, pH and temperature.

i. The monitoring results shall be reported on a supplemental form provided by the MPCA and submitted with the monthly DMR.

ii. The monitoring results shall also be reported daily by telephone or facsimile to the MPCA.

iii. The Permittee shall continue monitoring the receiving water once per day until the MPCA grants approval to reduce or cease monitoring.

d. Within five (5) days of discovery of the tile line discharge exceedance, the Permittee shall submit to the MPCA:

i. A description of the discharge, approximate volume, and the cause of noncompliance.

ii. A written description of the noncompliance; the cause of the noncompliance; and, the exact dates of the period of the noncompliance.

If the exceedance has not been corrected, the Permittee shall provide the anticipated time it is expected to continue, and the steps taken or planned to reduce, eliminate, and prevent recurrence of the exceedance.

Chapter 4. Industrial Spray Irrigation

6. Compliance Responsibility

Exceedance of a Tile Line Discharge Intervention Limit for Ammonia Nitrogen

6.2 If there is an exceedance of a tile line discharge intervention limit of 4 mg/L for total ammonia-nitrogen in a tile line discharge, the Permittee shall take the following actions:

a. Determine the cause of the intervention limit exceedance and take corrective actions to eliminate the intervention limit exceedance.

b. Within thirty (30) days of discovery of the exceedance, the Permittee shall submit a written report of the corrective actions that were taken to eliminate the exceedance with a plan to prevent further tile line intervention limit exceedances in the future.

c. Submit an evaluation of the results of this corrective action with the Annual Report required by the 'Annual Report' part of this chapter.

Chapter 4. Industrial Spray Irrigation

6. Compliance Responsibility

Exceedance of Intervention Limit in Groundwater for Nitrate Nitrogen

6.3 If there is an exceedance of a groundwater monitoring intervention limit for nitrate nitrogen, the Permittee shall take the following actions:

a. Determine the validity of the test result and resample if past test results have not exceeded the intervention limit or if the result may be invalid for other reasons.

b. Submit a data analysis of the exceedance that includes the following information as a supplement to the Annual Report required by the 'Annual Report' part of this chapter:

i. Potential sources of the ground water exceedance and causes for the limit exceedance.

ii. An evaluation of the exceedance(s) as compared to past groundwater quality data that considers trends and the significance of limit exceedances.

iii. Nutrient loading from process wastewaters relative to crop uptake and yield, application timing, tile line quality data, soil nitrate levels, and other factors that could contribute to the exceedance for all spray field management areas affecting the monitoring well for the last five years.

iv. Tile line discharge quality over the last five years.

c. Submit a corrective action plan that describes the steps to be taken to reduce nitrate-nitrogen concentrations in the groundwater. The corrective action plan must be updated annually to determine its effectiveness and whether alternative actions are necessary to reduce nitrate nitrogen levels in groundwater. The corrective action plan and its updates must be submitted as part of the Annual Report required by the 'Annual Report' part of this chapter.

6.4 For an intervention limit exceedance that is greater than or equal to the drinking water standard for nitrate nitrogen of 10 mg/l, or background levels (whichever is greater), the following additional actions must be taken unless MPCA states in writing that these actions are not necessary:

a. The need for installation of additional wells to determine the extent of groundwater contamination must be evaluated and additional wells installed if needed.

b. A groundwater receptor survey must be conducted for the area within a 1.0-mile radius of the spray field boundary that includes property owner, property address, well depth, and identification of the aquifer drinking water is drawn from.

c. An evaluation of the hydraulic interconnection between the aquifer being monitored and the drinking water aquifer(s) if they are different.

d. Sampling and analysis of drinking water wells for nitrate nitrogen within a 1.0-mile radius from the spray field boundary if aquifers are found to be interconnected, and there is a potential that drinking water may be affected by the irrigation of process wastewater.

e. Other actions as necessary to evaluate the problem and determine appropriate corrective actions to be taken.

f. Submit this information as part of the Annual Report required by the 'Annual Report' part of this chapter.

Chapter 4. Industrial Spray Irrigation

6. Compliance Responsibility

Exceedance of Application Rate for Nitrogen

6.5 If the intervention limit for the Nitrogen Application Rate is exceeded, the Permittee shall submit a corrective action plan.The corrective action plan must include detailed information on how nitrogen loading will be managed both on a short and long term basis so that the intervention limit for nitrogen loading is not exceeded and a detailed evaluation and summary of the following information:

a. Ground water quality trends from monitoring wells for the spray field management area where the exceedance occurred.

b. An evaluation of nutrient loading from process waste water relative to crop uptake and yield for all sprayfield management areas over the last five (5) years.

c. Tile line discharge quality over the last five (5) years.

d. Other information that can assist in providing a more complete evaluation of the possible impacts the exceedance may have on the environment. Examples of this type of information may include soil nitrate concentrations, weather conditions, timing of applications, nitrogen mineralization or loss study results, and so forth.

The corrective plan must be submitted as part of the 'Annual Report' required by the Annual Report part of this chapter.

Exceedance of Soil Limit for Sodium Adsorption Ratio (SAR), Specific Conductance, and/or Chloride

6.6 If an intervention limit for SAR, specific conductance, or chloride is exceeded, the Permittee shall submit for MPCA review and approval, a corrective action plan as a supplement to the Annual Report required by the Annual Report part of this chapter.

The plan shall include detailed information pertaining to:

a. How salts in the process wastewater can be reduced;

b. The impacts of the exceedance on soils, crop health/vigor, and groundwater quality; and,

c. Proposed changes in operation to mitigate any problems identified.

7. Annual Report

7.1 Submit an Industrial Spray Irrigation Annual Report by February 1 of each year following permit issuance, for the previous calendar year. Land application monitoring results for the previous calendar year shall be summarized and submitted to the MPCA.

Chapter 4. Industrial Spray Irrigation

7. Annual Report

7.2 The Industrial Spray Irrigation Annual Report must include the following information:

a. A description of the treatment system, including any changes made during the year.

b. A description of system operation during the past year, including the following:

i. Nutrient and hydraulic loading;

ii. Irrigation scheduling and intensity;

iii. Crop harvesting; and,

iv. Problems encountered and any remedial actions.

c. A description of system maintenance during the past year, including the following:

i. Crop information; and,

ii. Irrigation equipment.

d. A summarization of monitoring results obtained during the past year, including the following:

i. Groundwater monitoring, including groundwater countour maps;

ii. Soils monitoring;

iii. Effluent monitoring; and,

iv. Crop monitoring information.

e. An analysis of the information submitted, and recommendations for changes, including the following:

i. Analysis of the year's operation; and,

ii. Proposed changes for the coming year's operation.

f. Sweet Corn Silage Summary, including the following:

i. list of sites who received sweet corn silage with quantities;

ii. inspection reports for those sites who store more than 150 tons of sweet corn silage.

8. Records

8.1 The Permittee shall maintain a daily record of the operations and observations of the irrigation system at the facility, which shall be available at the facility for review by MPCA staff.

At a minimum, daily operational records shall be maintained pertaining to flows, areas of irrigation, inches of wastewater applied, and nitrogen loading. Also, visual observations shall be performed to determine any ponding, runoff, tile line discharges, and crop conditions.

Chapter 4. Industrial Spray Irrigation

9. Additional Requirements - Sweet Corn Silage Storage

9.1 Approval required. Storage at any location of more than 1,000 tons of fresh sweet corn silage at any given time must be approved by the MPCA. Persons who store 1,000 tons or more of fresh sweet corn silage must submit plans and specifications to the MPCA for approval prior to construction or use of the sweet corn silage storage facility.

9.2 All sweet corn silage is considered to be fresh silage, including sweet corn silage that is pressed to remove some of the water content.

9.3 Persons who store less than 1,000 tons of fresh sweet corn silage at any one time must meet the criteria outlined in the MPCA fact sheet, "Proper Storage of Silage" (wq-f8-20).

9.4 Sites that store more than 150 tons of fresh sweet corn silage at any given time must be inspected annually by the generator of the silage to ensure that best management practices listed in the above fact sheet are being maintained. If the best management practices are not being met, corrective actions shall be taken to meet the criteria.

9.5 The Permittee shall keep a record of the locations and quantities of sweet corn silage transferred for storage and/or feeding.

9.6 Runon of stormwater or other wastewater to the silage storage area and/or runoff from the silage storage area is not allowed. Measures to prevent runon and runoff to/from silage storage areas must be taken and ensured by the Permittee, with corrective action to be taken by the Permittee, as appropriate.

10. Definitions

10.1 "Aquifer" means unconsolidated material or rock capable of producing water to supply a well.

10.2 "Groundwater" means water contained below the surface of the earth in the saturated zone including, without limitation, all waters whether under confined, unconfined, or perched conditions, in near-surface unconsolidated sediment or regolith, or in rock formations deeper underground.

10.3 "Industrial Spray Irrigation" means the act of supplying process waste water for agricultural and horticultural purposes to land, crops, or plants by means of pipes, hoses, sprinklers, drippers, ditches, furrows, or other devices that are connected directly to a source of process waste water.

10.4 "Monitoring well" means an excavation that is drilled, cord, bored, washed, driven, dug, jetted, or otherwise constructed to extract groundwater for physical, chemical, or biological testing. "Monitoring well": includes a ground water quality sampling well.

10.5 "Sodium Adsorption Ratio (SAR)" means a ratio of specific available cations in the soil solution which indicates if the accumulation of sodium in the soil exchange complex will lead to a degradation of the soil structure and thus a sharp reduction in infiltration and permeability rates. Concentrations are expressed in milliequivalents/liter (meq/l).

10.6 "Sprayfield" means the area of land that receives the actual application of wastewater. This area does not include buffer zones, setbacks or other land where waste water is not applied.

10.7 "Type V Certified Operator or Inspector" means a person certified according to Minn. R. ch. 7048 for land application. A Type V facility is any disposal facility that applies on the land any nonhazardous liquid waste from commercial, industrial, or agricultural operations.

Chapter 5. Land Application of Industrial By-Products

1. Authorization

1.1 This chapter authorizes the Permittee to land apply industrial by-products generated during the production and wastewater treatment process, as described in the 'Facility Description' section of this permit. This activity is limited by the 'Limits and Monitoring' section of this permit as well as the other terms and conditions of this permit.

2. Plan for Sampling, Analysis, and Field Equipment Calibration

2.1 Submit a Sampling, Analysis and Field Equipment calibration plan to address storage, management, and land application schedules by 60 days after permit issuance.

2.2 The Sampling, Analysis and Field Equipment Calibration plan must include, but is not limited to the following:

a. A description of how samples will be collected to ensure representative samples of the industrial by-product land applied are obtained, which shall include the identification of sampling locations, and a description of a sampling schedule;

b. A list of all parameters that will be analyzed, the frequency they will be analyzed, maximum holding times, and preservation methods that will be used;

c. The laboratory methods used for analysis and reporting limits necessary;

d. A schedule and detailed procedures which will be followed for calibration of field equipment to determine actual application rates of industrial by-product;

e. Example of record keeping forms that will be used for sampling, analysis, and equipment calibration;

f. Position of the person(s) responsible for sampling and calibration of field equipment; and

g. Description of measures and practices that will be implemented to provide reasonable assurance that the land application, staging and/or storage of industrial by-product will not cause nuisance conditions.

3. Limits and Monitoring Requirements

Parameters

3.1 The 'Limits and Monitoring' section of this permit contains the parameters that must be analyzed in each industrial by-product that is land applied as well as the sampling frequency for the industrial by-product land applied.

Chapter 5. Land Application of Industrial By-Products

4. Soil Chemical Suitability Requirements and Limits

4.1 Soil samples must be collected and analyzed within the three-year period prior to industrial by-product application for the parameters listed below:

Parameter	Limit	Units
Organic Matter, Total in Soil	Monitor Only	%
pH	Monitor Only	SU
Phosphorus, BRAY-1 Ext in Soil	200	ppm
Phosphorus, Olson Ext in Soil	180	ppm*
Potassium, NH4AC, Exch In Soil	Monitor Only	ppm
Salts, Water Soluble in Soil	4	mmho/cm

* The soil test method used for extractable phosphorus in the soil is either the Bray P-1 test, or the Olson test; the Olson procedure shall be used if the soil pH is 7.4 or higher.

A site shall not be used for land application until sample results are received and evaluated to determine soil suitability.

If any of the soil limits are exceeded, the site shall not be used for land application by the Permittee until sample results show limits are met.

4.2 Soil samples shall be a composite sample consisting of a mixture of 15-20 sub-samples taken in the plow layer. A minimum of one composite sample per site is required. On sites that are greater than 40 acres in size, a minimum of one composite sample per 40 acres of area is required.

5. Soil Physical Suitability Requirements

5.1 The soil will be considered suitable if the site is used for growing a crop which is harvested and removed during the cropping year that the industrial by-product is land applied.

5.2 If the site does not meet this condition or the application site is set aside land (CRP), pasture land, non-agricultural land, or the industrial by-product contain pathogens, all the soil suitability criteria in a through c, below, must be met:

a. The soil texture at the zone of industrial by-product application must be fine sand, loamy sand, sandy loam, loam, silt, silt loam, sandy clay loam, clay loam, sandy clay, silty clay loam, silty clay or clay.

b. The depth to bedrock must be at least 3 feet, unless the soil is classified as a highly permeable soil, in which case the minimum depth is increased to 5 feet.

c. The depth to the seasonal high water table must be at least 3 feet, unless the soil is classified as a highly permeable soil, in which case the minimum depth is increased to 5 feet.

5.3 On sites where tile drainage is installed, the depth to tile lines is considered the depth to the seasonal high water table. Tiling must be adequate to ensure the three-foot separation distance can be maintained. Maps of the tiling system must be provided indicating their depth and placement in the field. Water tables classified as perched or epi-saturated by the Natural Resources Conservation Service are not considered to be the seasonal high water table.

5.4 Soil suitability can be determined by obtaining information from soil surveys published by the Natural Resources Conservation Service or by characterization of the site by a state of Minnesota licensed soil scientist or other qualified person.

Chapter 5. Land Application of Industrial By-Products

6. Site Suitability Criteria

6.1 The criteria in this section detail the suitability of land application sites for receiving industrial by-products. All criteria within this section must be met for a site to qualify as being suitable for land application of an industrial by-product.

6.2 The Permittee is responsible for determining the suitability of the site for industrial by-product application, including a determination that the site meets the soil sample limitations identified above for Land Application Stations in the 'Limits and Monitoring' section of this permit, and the 'Site Suitability Criteria' of this part.

6.3 Slope Restrictions. The slope restrictions in Table 3 of the appendix to this permit apply to all sites used for land application of industrial by-products.

6.4 Separation Distances. The separation distances in Table 4 of the appendix to this permit shall be maintained on all land application sites.

7. Notification Procedures

Notification to MPCA

7.1 Prior to the use of a site for land application of an industrial by-product for the first time, the Permittee shall submit a completed 'Industrial By-Products Land Application Site Application Form', at least 30 days prior to application of industrial by-product at the respective site. The soil test results submitted with this form shall be collected no greater than six (6) months prior to submittal of the form. This notification must be repeated if any of the properties or conditions of the site changes, including a change in site name, site ownership, acreage used, soil types, slope and/or drainage capacity (tile lines). A copy of the form is included in the appendices section of this permit and is available electronically at http://www.pca.state.mn.us/water/landapp.html.

7.2 Prior to the use of a structure for the storage of an industrial by-product, the appropriate and respective certifications required by the Industrial By-Product Storage section of this permit shall be provided to the MPCA.

Local Notification

7.3 Before land application activities are initiated within a county, city or township for the first time, written notification shall be provided to local officials at least 30 days before initiating land application activities in the respective jurisdiction. The first time a Permittee applies an industrial by-product within a county, township, or city, the Permittee must satisfy the following notification procedures:

a. Notify the county's Planning and Zoning or Solid Waste Officer (whichever is appropriate for the county) in writing 30 days before the industrial by-product is land applied within the county; and,

b. Notify the township clerk in writing 30 days before the industrial by-product is land applied within the township; or,

c. Notify the mayor or other appropriate official of the city in writing 30 days before the industrial by-product is land applied within the city limits.

Chapter 5. Land Application of Industrial By-Products

7. Notification Procedures

7.4 Notifications must be dated and contain a description of how the industrial by-product will be managed during land application, to include the following elements:

a. Description of the industrial by-product to be land applied, including a description of how the industrial by-product is produced, what nutrients/pollutants are present in the industrial by-product, and the limiting nutrient/pollutant in the industrial by-product being applied.

b. Description of how any staging and/or short-term storage of the industrial by-product will be conducted prior to land application.

c. Description of the applicable slope and setback requirements that will be followed during land application.

d. Response section must be provided to notify the local officials there is an opportunity to request additional information regarding copies of records, testing information, individual site information, listing of all sites, etc; and/or a section to provide information to the generator of the waste, applicator(s) and land owner(s) of any local requirements.

7.5 If any significant changes in the management of the industrial by-product described in the notification occur, including changes affecting the staging and/or storage of the industrial by-product, the notification process must be repeated.

End User Notification

7.6 For each site used for land application of the industrial by-product, the end user must receive, at a minimum, the information necessary to meet the requirements of this permit. This includes information such as actual nutrient application rates, any restrictions on the by-product use, crop restrictions, and so forth.

7.7 The end user must be provided with this information in writing as soon as possible and in no case more than 6 weeks after application has been completed. Records demonstrating compliance with end user notification shall be maintained in accordance with the Records section of this permit.

7.8 The Permittee shall inform end users that they should take appropriate credits for all plant nutrients supplied by industrial and municipal by-products, manures, and fertilizers so that maximum allowable application rates are not exceeded.

8. Site Management, Limitations, and Restrictions

8.1 Hydraulic Loading Limits. Hydraulic loading are set to prevent ponding and runoff from land application sites. The limitations specified in this part shall not cause any other application limits of this permit to be exceeded.

Daily application rates for industrial by-products which are surface applied are limited to:

a. 10,000 gallons/acre/day for fine textured surface soils with United States Department of Agriculture (USDA) textural classifications of clay loam, silty clay loam, sandy clay, silty clay;

b. 15,000 gallons/acre/day for medium textured surface soils with USDA textural classifications of loam, silt, silt loam, and sandy clay loam; and,

c. 25,000 gallons/acre/day for coarse textured surface soils with USDA textural classifications of sand, loamy sand, and sandy loam.

Chapter 5. Land Application of Industrial By-Products

8. Site Management, Limitations, and Restrictions

8.2 Winter Application. During the time that soils are frozen or snow covered, so that incorporation or injection is not possible, the following requirements shall be met:

a. A maximum hydraulic loading rate of 15,000 gallons/acre/winter for liquid industrial by-product shall not be exceeded.

b. Applications are restricted to areas with 0 % to 2 % slopes.

c. All separation distances identified in Table 4 of the appendix to this permit must be maintained.

d. For the purposes of this permit, it is assumed that industrial by-product is unable to be incorporated or injected during the months of December, January, February, and March unless specific field or climatic conditions are observed and documented appropriately in the Daily Hauling Record.

8.3 Additional measures may be necessary to prevent runoff of the material during the Spring thaw, such as installation of silt fences and berms and planting of grass buffer strips, to meet the requirement that no runoff of the industrial by-product from the application site is allowed.

8.4 Miscellaneous Management Practices/Restrictions. All of the following standards apply to the land application of industrial by-products.

a. No runoff of the industrial by-product from the application site is allowed. Management tools such as installation of silt fences and berms, and planting of grass buffer strips may be required to meet the no-runoff requirement.

b. No ponding of liquid industrial by-products is allowed after 6 hours of application.

c. All of the industrial by-product land applied must be uniformly distributed over the area of the site used during application.

d. The application area must be clearly identified with flags, stakes, or other easily seen markers at the time of application to identify the site boundaries, separation distances, and unsuitable application areas within the site. Where site boundaries can be identified by field roads, and fences, and so forth, identification is not necessary.

e. The industrial by-product must be immediately incorporated or injected on sites subject to flooding.

f. Application of the industrial by-product is not allowed on areas of a site ponded with water or industrial by-product.

g. Application of the industrial by-product is not allowed on areas that remain fallow for the entire cropping year.

h. Liquid industrial by-products must be injected or immediately incorporated when applied on soil with a surface horizon permeability rate of less than 0.2 inches/hour.

i. The industrial by-product shall not be applied by spraying from public roads or across road right of ways without prior written MPCA approval.

Chapter 5. Land Application of Industrial By-Products

8. Site Management, Limitations, and Restrictions

8.5 Nuisance conditions. Land application, staging and/or storage of industrial by-product shall be performed to minimize odors, noise, and vector attraction. The Permittee shall provide reasonable assurance that the land application, staging and/or storage of industrial by-product will not cause nuisance conditions. All aspects of land application of the industrial by-product shall be considered in providing reasonable assurance, to include loading, unloading, transportation, storage and land application of the industrial by-product, and shall be specified in the Sampling, Analysis, and Field Calibration Equipment Plan.

9. Operator Certification

9.1 All land application activities must be done by or under the supervision of a Type IV certified operator.

9.2 The number of certified operators required for land application activities is subject to the requirements of Minn. R. 7048.0500.

10. Records

10.1 Record Retention. The following records shall be maintained at the facility for a minimum of three (3) years, and shall be available at the facility for review at any time by MPCA staff:

a. Copy of the submitted 'Site Notification Form' for each land application site, including the site map identifying the exact site location of the site, soil types on the site, and areas that are required to be excluded from use.

b. Documentation of site suitability of each site, including a copy of any lab results and other analytical information related to the industrial by-product or site used for application.

c. Documentation of loading calculations for each site, including the maximum allowable industrial by-product application rate for each site being used during the current cropping year.

d. Documentation of acres used for application.

e. Daily hauling records which indicate quantities of industrial by-product transferred to storage or land applied with the storage or site location identified for each land application site or storage area/structure.

f. Sampling and calibration records as required by the Sampling, Analysis and Field Equipment Calibration Plan as well as a copy of the submitted Sampling, Analysis, and Field Equipment Calibration Plan.

g. Copy of the submitted Industrial By-Products Annual Report Form and any other reported information necessary to prepare the Annual Report.

h. Copy of notification letter(s) and other information submitted to each city, county and township.

i. Copy of written information provided to each end user of the industrial by-product.

10.2 Record Retention continued:

j. Any approved plans or special approvals required by this permit.

k. Copy of any 'Transfer to Manure Storage Form' submitted for storage of industrial by-product in a manure storage structure.

l. Any applicable records requirements pertaining to the storage of industrial by-product as specified by Industrial By-Products Storage section of this permit.

Chapter 5. Land Application of Industrial By-Products

10. Records

10.3 The following information shall be maintained as the 'Daily Hauling Record,' organized by site or storage area/structure for each site or storage unit used for the land application or storage of industrial by-product covered by this permit, including manure storage structures and structures used for the storage of sweet corn silage:

a. Name of site;

b. Date delivered to site/storage are/structure;

c. Date applied to site/removed from storage area/structure;

d. Volume applied/delivered to site/storage area/structure;

e. Application rate;

f. Visual observations of site, including but not limited to an indication of whether soils are frozen or snow covered, such that incorporation or injection of industrial by-product is not possible; and

g. Running total of industrial by-product applied to site/added to storage unit during the cropping year.

10.4 The Permittee shall maintain records for each sample and measurement. The records shall include the following information:

a. the location and date of the sample or measurement;

b. the date of analysis;

c. the name of the person who performed the sample collection, measurement, analysis, or calculation;

d. the analytical techniques, procedures and methods used; and,

e. the results of the analysis.

10.5 Records for soil sampling and samples related to the industrial by-products shall be maintained in accordance with the Permittee's Sampling, Analysis and Field Equipment Calibration Plan, as required in the Sampling and Analysis part of this chapter.

10.6 The Permittee shall keep the records required by this permit for at least three (3) years, including any calculations, original recordings from automatic monitoring instruments, and laboratory sheets. The Permittee shall extend these record retention periods upon request of the MPCA and/or during the course of an unresolved enforcement action.

11. Annual Report

11.1 Submit an Industrial By-Products Management Annual Report by February 1 of each year following permit issuance.

Chapter 5. Land Application of Industrial By-Products

11. Annual Report

11.2 The Industrial By-Product Land Application Annual Report must include the following information:

a. Total quantity of each industrial by-product land applied during the cropping year (if none land applied, this can be indicated on the form).

b. Results of all analyses conducted and the average of these analyses.

c. Site specific information:

i. Crops grown/vegetation receiving nutrient benefit;

ii. Realistic yield goal;

iii. Months site used;

iv. Soil analysis results;

v. Application rate of industrial by-product;

vi. Application rates for sodium, phosphorus, and nitrogen; and,

vii. Description of any management problems associated with land application that occurred during the cropping year and how these problems have been or will be resolved.

d. Total quantity of industrial by-product transferred to/from a storage area/structure under the terms of the Industrial By-Product Storage section of this permit, if applicable.

11.3 The Permittee shall report monitoring results for the completed reporting period in the units specified by this permit on the Industrial By-Product Land Application Annual Report form, as provided in the appendices section of this permit or electronically at http://www.pca.state.mn.us/water/landapp.html.

12. Industrial By-Product Storage

12.1 Applicability. Storage or staging of industrial by-product prior to land application is allowed only under the terms and conditions of this permit for the industrial by-product(s) covered by this permit. This section is divided into several subparts, which specifies the applicable standards to the storage area and/or structure based on the length and method of storage.

12.2 Dewatered industrial by-products being spread concurrent with the unloading of bulk material on the land application site and not stockpiled overnight are not considered storage and are not subject to the additional requirements for storage under this part.

12.3 For the purposes of this permit, management of industrial by-product in a lagoon or pond system that is an inherent part of a wastewater treatment system that has already been expressly approved by the Agency in writing does not constitute storage and is not covered under this permit. Inherent to a wastewater treatment system means that the lagoon or pond system is physically connected to the treatment facility, and is closed loop in nature.

12.4 Storage of a dewatered industrial by-product that has already been approved under a previous permit action or other written approval must meet the requirements of the applicable parts of this chapter.

A. Requirements Applicable for Storage of Industrial By-Product

Chapter 5. Land Application of Industrial By-Products

12. Industrial By-Product Storage

12.5 Prior to use of an area or structure for storage of an industrial by-product within a county, township, or city, the Permittee must notify the appropriate local authorities as described below. Notification to local officials as required by this section shall include as least the following information, and a response section:

a. a description of the necessity for storage at the land application site;

b. the location of the storage area delineated on maps submitted;

c. the dimensions of the storage area;

d. the quantity of industrial by-product to be stored;

e. expected duration of storage before land application; and,

f. a description of precautions or practices to minimize or prevent drainage, runoff or nuisance conditions at the storage area.

12.6 Separation Distances. The separation distances in Table 7 of the 'Tables for Industrial By-Product Chapter' appendix of this permit shall be maintained for all areas and structures used for the storage of industrial by-products.

12.7 Management of Storage Area. All of the following requirements apply to areas and structures used for the storage of industrial by-products:

a. No runoff of the industrial by-product from the storage site is allowed.

b. If the storage area contains any particulate matter that may be subject to wind dispersion, the owner or operator must cover or otherwise manage the waste to control wind dispersion.

c. Nuisance conditions resulting from the storage of industrial by-product must be controlled and managed by the Permittee.

12.8 Records Requirements. In addition to the records retention requirements of this permit, owners and operators of structures used for the storage of industrial by-products shall retain, for the life of the storage structure, the following additional records:

a. maintenance and repair documentation;

b. third-party certifications of storage structure(s) used for the storage of industrial by-product; and

c. as-built drawings of any storage structure(s) used for the storage of industrial by-product.

Additional requirements pertaining to record retention is required in accordance with Minn. R. chapter 7151 for storage of an industrial by-product in a tank or tank system.

B. Requirements for Short-Term Storage of Dewatered Industrial By-Product

12.9 Short-term storage requirements under this section are applicable to industrial by-products that meet the definition of "Dewatered Industrial By-product", as defined by this permit.

Chapter 5. Land Application of Industrial By-Products

12. Industrial By-Product Storage

12.10 In addition to the requirements under subpart A of this section ("Minimum Requirements for Storage of Industrial By-Products"), the following standards apply to the short-term storage of industrial by-products:

a. Storage under this section shall not exceed thirty (30) days.

b. Short-term storage shall only occur on the land application site where the industrial by-product will be applied. The quantity of industrial by-product to be stored at an application site shall not exceed the quantity of material that can be applied to that site.

c. Short-term storage shall not take place on land with a slope greater than two percent (2%) unless measures are taken to control water runoff.

C. Requirements for Long-Term Storage of Dewatered Industrial By-Product

12.11 Long-term storage requirements under this section are applicable to industrial by-products that meet the definition of "Dewatered Industrial By-product", as defined by this permit.

12.12 In addition to the requirements under subpart A of this section ("Minimum Requirements for Storage of Industrial By-Products"), the following standards apply to the long-term storage of industrial by-products:

a. Long term storage shall not exceed a period of 7 months.

b. Long-term storage of an industrial by-product is allowed only when land application will occur on the site where it is stored, or on land that is owned, leased, or rented by the same person, and all sites are within a one-half mile radius of the storage site.

c. Long-term storage shall not be allowed on land with greater than a two percent (2%) slope unless measures are taken to control water runoff.

d. Long-term storage areas shall be located in areas where the texture of all the horizons in the soil profile to a depth of five feet is sandy loam or finer, unless an impervious pad with a drainage collection system is constructed.

e. Long-term storage shall not take place on the same area for two or more consecutive years unless an impervious pad with a drainage collection system is constructed.

f. Prior to the use of an area for long-term storage (whether or not a pad is constructed), the Permittee shall submit boring logs from at least two soil borings taken to a depth of ten feet at the perimeter of the proposed storage area.

Boring logs must include the following information:

i. Texture and thickness of each soil horizon encountered;

ii. Color and presence or absence of mottling for each soil horizon encountered (by the Munsell Soil Color Charts);

iii. Depth to seasonal high water table, if encountered; and,

iv. Depth to bedrock, if encountered.

12.13 Locational Prohibitions. All of the locational standards in Table 7 apply to all areas and structures used for the storage of industrial by-products.

Chapter 5. Land Application of Industrial By-Products

12. Industrial By-Product Storage

12.14 Certification Required. Prior to use of a constructed pad or other structure for the long-term storage of an industrial by-product under this section, owners and operators must obtain and submit written certification from a Professional Engineer registered in the state of Minnesota stating that the storage area and/or structure (storage facility), based on their assessment of the requirements of the Long Term Storage of Dewatered Industrial By-Products section of this permit, is suitable for the long-term storage of the industrial by-product.

12.15 Certification Required. Prior to the use of an area for the long-term storage of an industrial by-product, the Permittee shall submit written certification by a Professional Soil Scientist registered by the state of Minnesota or a Professional Engineer registered in the state of Minnesota, that the site, based on their assessment of the boring logs required under the Long Term Storage of Dewatered Industrial By-Products of this permit, is suitable for the long-term storage of the industrial by-product.

Chapter 5. Land Application of Industrial By-Products

12. Industrial By-Product Storage

D. Additional Requirements for the Permanent Storage of Industrial By-Product

12.16 Permanent Storage Requirements are applicable to Industrial By-Products that are stored for a period of more than seven months and are not stored in a tank or tank system.

If manure becomes co-mingled with industrial by-products, all the waste in the structure is considered an industrial by-product.

12.17 In addition to part A (Minimum Standards for Storage of Industrial By-Products), the following standards apply to the permanent storage of industrial by-products:

a. Any basin, pit or lagoon used to store liquid industrial by-products shall not seep at a rate greater than 500 gallons per acre per day.

b. Any area used to store dewatered industrial by-products must be paved with asphalt, concrete, or other material meeting the seepage requirement above, and must be sufficient to bear the weight of unloading and loading trucks and equipment without cracking. The pad must be sloped and curbed to collect all runoff water. Runoff water must be collected and used in a manner approved by the MPCA.

c. The industrial by-product shall not be stored at the permanent storage location for more than three years without being processed or utilized.

d. Prior to operation of a storage facility, the Permittee shall evaluate the potential for migration of contaminants into adjacent subsurface soil, groundwater, or surface water from the stored industrial by-product. This evaluation must take into consideration the characteristics of the industrial by-product, the quantity of industrial by-product to be stored, and the length of time the industrial by-product will be stored.

12.18 Certification Required. Prior to use of a constructed area or structure for the permanent storage of an industrial by-product under this section, the Permittee must obtain and submit written certification from an engineer licensed in Minnesota stating that the storage area and/or structure (storage facility), based on their assessment of the requirements of this permit are suitable for the permanent storage of the industrial by-product.

E. Requirements for the Storage of Industrial By-Product in a Tank or Tank System

12.19 Certification Required. Prior to use of a tank for the storage of an industrial by-product under this section, owners and operators must obtain written certification from an engineer licensed in Minnesota stating that the tank, based on their assessment of the applicable provisions of Minn. R. chapter 7151 is compliant with the Above Ground Storage Tank Rules.

F. Additional Requirements for the Transfer of Industrial By-Products to Manure Storage Structures

12.20 Applicability. Structures designed primarily for the storage of manure wherein industrial by-product and manure are co-mingled are regulated by the requirements of Part F of this section.

12.21 Maximum Amount Transferred to Each Structure. A maximum of 50,000 gallons of industrial by-product, or up to 10 % of the available volume of the structure, whichever is greater, is allowed to be transferred to each approved manure storage structure. A second transfer to the manure storage structure during a cropping year is also subject to a maximum of 50,000 gallons, or up to10% of the available volume of the structure, whichever is greater. Two transfers of product are allowed as long as the first quantity is removed prior to receiving the second transfer. The available capacity of the structure at the time of transfer and the amount transferred shall be maintained in the Daily Hauling Record, as required by the Records section of this permit.

Chapter 5. Land Application of Industrial By-Products

12. Industrial By-Product Storage

12.22 Storage Structure Minimum Standards. The following restrictions apply to the storage of industrial by-product in a manure storage structure:

a. The structure shall meet the design and operational standards of Minn. R. 7020.2100 pertaining to liquid manure storage areas.

b. Biological treatment lagoons shall not be used for the storage of industrial by-product.

c. The manure storage structure shall be operated to maintain a minimum of three-foot freeboard at all times.

c. Industrial by-products must be compatible with the structure and manure to prevent damage to the structure and changes in biological activity. Examples of problems associated with incompatible wastes are damage to concrete and soil liners, physical or chemical changes in the mixture which make it difficult to agitate or pump, cause odors, or cause other nuisance or structural problems.

12.23 Approval Required. Use of manure storage structures for the storage of industrial by-products requires written MPCA approval prior to use of these structures.

12.24 To request approval of the manure storage structure, the Permittee shall:

a. Complete an Industrial By-Product Transfer to Manure Storage Application Form and submit it to the appropriate county official (feedlot officer in delegated counties or the county solid waste official in nondelegated counties) in the county in which the manure storage structure is located. A copy of the 'Industrial By-Product Transfer to Manure Storage' form is included in the appendices section of this permit and is available electronically at http://www.pca.state.mn.us/water/landapp.html.

b. Submit a copy of the county completed and signed form to the township or city where the manure storage structure is located.

c. Submit a copy of the county completed and signed form to the MPCA for review and approval.

12.25 Feedlot Facility Minimum Standards

In consideration for approval of a manure storage structure for industrial by-product use, the following standards apply to the facility storing the industrial by-product:

a. The feedlot receiving the industrial by-product must have a valid permit or certificate of compliance which identifies the manure storage structure.

b. The feedlot receiving the industrial by-product must be in compliance with agency feedlot and manure management requirements and have no unresolved compliance issues.

Chapter 5. Land Application of Industrial By-Products

12. Industrial By-Product Storage

12.26 Land Application of Industrial By-product/Manure Mixtures. The following requirements apply to the land application of mixtures of industrial by-products and manure:

a. Sampling and analysis of the industrial by-product/manure mixture must occur prior to land application to determine allowable application rates.

b. Land application of the mixture shall be in accordance with Minn. R. 7020.2225, pertaining to the land application of manure.

c. The Permittee shall provide the following information to the owner and operator of the manure storage structure at the time of transfer:

i. a copy of the analysis of the industrial by-product as required in the 'Limits and Monitoring' section and Table 1 of the appendix to this permit.

ii. a copy of the analysis of the industrial by-product/manure mixture.

iii. an account of the volume transferred to the manure storage facility.

12.27 Land Application of Industrial By-product/Manure Mixtures (continued)

d. The Permittee shall obtain a copy of the Manure Management Plan from the owner or operator of the manure storage structure and ensure that the addition of the industrial by-product is appropriately addressed in the Plan. A Manure Management Plan is required by Minn. R. chapter 7020 for operations with more than 300 animal units; for operations with less than 300 animal units, a MMP is not required, but the manure must be land applied in accordance with the requirements of Minn. R. chapter 7020.

e. The Permittee shall not relinquish control of the industrial by-product until the Manure Management Plan has been appropriately updated or if there is reason to believe that the industrial by-product will not be managed in accordance with this permit or Minn. R. 7020.2225.

f. The total quantity of by-product transferred and a copy of analysis results shall be submitted to the agency in accordance with the 'Annual Report' part of this chapter.

g. Daily Hauling Records pertaining to the transfer of the industrial by-product to/from a manure storage structure, as required by the Records section of this permit.

Chapter 5. Land Application of Industrial By-Products

13. Additional Requirements - Industrial By-Products Supplying Nitrogen

Total Available Nitrogen

13.1 For the purposes of this permit, the total quantity of nitrogen available for crop uptake during the cropping year is the sum of available organic nitrogen and ammonia nitrogen.

a. Available organic nitrogen. The available organic nitrogen shall be determined by one of the methods in items i or ii:

i. The total quantity of organic nitrogen present in the industrial by-product will be considered 50% available during the cropping year it is applied and 25% the following cropping year (carry over nitrogen)..

ii. The quantity of organic nitrogen available in the IBP during the cropping year it is applied and subsequent years (carry over) will be determined by a mineralization study. The mineralization study will determine the rate and quantity of organic nitrogen mineralized during the cropping year it is applied and the rate and quantity of nitrogen mineralized during the second cropping year after application. To be used for the purposes of this permit, the mineralization study, including study protocol, must be approved by MPCA prior to initiation of the study.

b. Ammonia nitrogen. The quantity of ammonia nitrogen used for calculating total available nitrogen is equal to 100% of the ammonia nitrogen contained in the industrial by-product when it is injected or immediately incorporated or 50% of the ammonia nitrogen when it is surface applied without immediate incorporation.

Maximum Allowable Nitrogen Application Rates

13.2 Maximum allowable nitrogen application rates shall be based on recommendations from the University of Minnesota Extension Service. These recommendations are based on soil analyses, realistic crop yield goals, and previously grown crops. This information is available from the MPCA upon request. When information on recommended nitrogen application rates is not readily available or agreed upon, MPCA written approval must be obtained for the nitrogen application rate proposed.

13.3 Maximum allowable nitrogen application rates for selected crops which do not have University of Minnesota Extension Service recommendations for nitrogen are provided in Table 6 of the appendix to this permit.

13.4 Industrial by-products shall not be applied at rates that cause the annual maximum allowable nitrogen application rate to be exceeded. Maximum allowable nitrogen application rates must take into account all available nitrogen supplied by industrial and municipal by-products such as biosolids, compost and septage, and fertilizers applied on the site.

Application Management

13.5 When no crop is grown on the application site during the time period between July 1 through August 31, the following requirements apply:

a. Applications are limited to rates which supply no more than 50 pounds per acre of available nitrogen.

b. Available nitrogen for the following cropping year shall be the sum of the total amount of nitrogen applied between July 1 and August 31 plus applicable carry over from earlier industrial by-product application.

13.6 The maximum application rate of an industrial by-product allowed after the second cutting of a hay crop shall not provide more than 50 percent of the maximum allowable nitrogen based on the recommendations from the University of Minnesota Extension Service or Table 6 in the appendix of this permit.

Chapter 5. Land Application of Industrial By-Products

14. General Requirements

14.1 Characterization of the industrial by-product at the time of permit application must indicate all of the eligibility requirements in this part are met.

a. The industrial by-product cannot be a hazardous waste.

b. Concentrations of any of the analytes in the industrial by-products cannot exceed the limits for the specified analytes below. Industrial by-products cannot be diluted or mixed with other materials before this determination has been made.

Concentration limits for industrial by-products on a dry weight basis:

Total Arsenic: 41 mg/kg
Total Cadmium: 39 mg/kg
Total Copper: 1500 mg/kg
Total Lead: 300 mg/kg
Total Mercury: 5 mg/kg
Total Molybdenum: 75 mg/kg
Total Nickel: 420 mg/kg
Total Selenium: 100 mg/kg
Total Zinc: 2800 mg/kg
Total Dioxin equivalents: 10 parts per trillion
Total Polychlorinated biphenyls: 6 mg/kg

c. Annual application rates of the industrial by-product cannot exceed a sodium application rate limitation of 170 lb/acre/year.

Chapter 6. Industrial Pond System

1. Authorization

1.1 This chapter authorizes the Permittee to manage wastewater in a pond system, as described in the 'Facility Description' section of this Permit. This activity is limited by the 'Limits and Monitoring' section of this Permit, as well as the other terms and conditions of this Permit.

1.2 The requirements of this chapter apply to all components of the permitted pond system, including but not limited to all impoundments at the facility used for collection, containment, storage, and/or treatment; and all related structures, conveyances, and/or appurtenances.

2. Operation and Maintenance

Install Equipment

2.1 Within the first year following permit reissuance, the Permittee shall install equipment to measure and record the volume of influent wastewater to Lagoon 1. The equipment must enable the Permittee to measure the total volume of wastewater transferred to the pond within 10% accuracy. A proposal detailing the equipment and recording procedures shall be submitted for MPCA review and approval, prior to the installation of the monitoring equipment.

2.2 A final report shall be submitted within 14 days of installation detailing the type of equipment and date of installation.

Pond Performance Evaluation

Chapter 6. Industrial Pond System

2. Operation and Maintenance

2.3 Within three years of installation of the flow measurement and recording equipment, the Permittee shall submit a Pond Performance Evaluation report to the MPCA.

2.4 The Pond Performance Evaluation report shall include at least the following elements for each wastewater impoundment at the Facility:

a. Two full spray irrigation seasons worth of flow data, including influent volumes to Lagoon 1 and the total volume of wastewater sprayed from the pond.

b. The water levels in Lagoon 1 at the start and end of each spray irrigation season.

c. Additional pond performance data, calculations and graphs for each impoundment at the Facility, including but not limited to water balance data and capacity/volume use comparisons.

d. Most recent three years worth of available monitoring well data from wells located upstream and downstream from Lagoon 1.

e. A determination of whether the seepage requirements specified by part 2.3 of this chapter, relative to liner integrity of each impoundment at the Facility are being met;

f. A certification from a registered professional engineer with expertise in wastewater structures that the respective impoundment at the Facility meets the technical criteria specified by parts 2.3, 2.4 and 2.5 of this chapter; or,

g. If the professional engineer can not certify that all impoundments meet the required technical criteria, a Pond Restoration Plan shall be submitted for MPCA review and approval, to be completed by a registered professional engineer with expertise in wastewater structures. The Pond Restoration Plan shall include, at minimum, a proposal of corrective actions for the restoration of any impoundment at the Facility to meet the technical criteria in parts 2.5, 2.6 and/or 2.7 of this chapter, and an implementation schedule for the proposed actions.

Maintenance of Wastewater Ponds

2.5 Liner Performance. Wastewater ponds at the facility shall maintain liner systems that restrict infiltration losses to less than 500 gallons per acre per day if the pond was constructed after May 16, 1975 or less than 3,500 gallons per acre per day if the pond was constructed before May 16, 1975.

Chapter 6. Industrial Pond System

2. Operation and Maintenance

2.6 Locational Standards. All of the following locational standards apply to any wastewater impoundment at the Facility:

a. The impoundment should be located entirely above the high water table. A minimum separation of 4 feet (1.2m) between the bottom of the pond and the maximum ground water elevation should be maintained.

b. The impoundment may not be located within a shoreland or wild and scenic river land use district governed by Minn. R. chapters 6105 and 6120.

c. The impoundment may not be located within a wetland.

d. The impoundment may not be located within a location where emissions of air pollutants would violate the ambient air quality standards in Minn. R. chapters 7005, 7007, 7009, 7011, 7017, 7019, and 7028 and Minn. R. parts 7023.0100 to 7023.0120.

e. The impoundment may not be located in the designated Karst Region in the Southeastern portion of Minnesota that was subject to the 1993 Administrative Order that required the preparation of a contingency plan.

f. The impoundment should not be located in an area which is unsuitable because of topography, geology, hydrology, or soils.

2.7 Operating Depth. All of the following apply to impoundments at the Facility:

a. Except for impoundments lined with synthetic material, such as HDPE or PVC, impoundments that do not discharge continuously shall maintain a minimum depth of 2 feet at all times, except for maintenance.

b. At least 3 feet freeboard on all impoundments and wastewater solids containment dams at the Facility shall be maintained at all times.

c. Based on specific Facility conditions and upon demonstration of an acceptable alternative, an alternate performance standard may be approved by the MPCA. Specific written authorization by the MPCA shall be obtained prior to implementing an alternately approved performance standard in lieu of item a. and/or b. of this part.

2.8 An approved rip rap cover that meets MPCA's "Riprap Criteria for Stabilization Ponds" (5/91) shall be maintained on any earthen wastewater impoundment dikes from one foot above the high water line to the toe of the dike. Where riprap is not used, the Permittee shall maintain a vegetative cover of shallow-rooted, perennial, low-growing grasses that withstand erosion and inundation and that can be mowed.

2.9 Plants with long root structures, such as alfalfa, reed canary, willows, poplars, cottonwoods, shrubs, and cattails shall not be allowed to grow in the pond or on the dikes, regardless of water depth in the pond. Such harmful vegetative growth shall be controlled and such plants removed from the pond and pond structure.

2.10 The Permittee shall use approved methods to prevent muskrats and other burrowing animals from tunneling and causing damage to the pond liner or dikes.

2.11 Appropriate signs should be provided along the pond perimeter to designate the nature of the facility and advise against trespassing. At least one sign shall be provided on each side of the site, and one for every 500 feet of its perimeter.

2.12 In addition to the requirements of this Permit, the Permittee shall operate and maintain the pond system in general accordance with MPCA's "Stabilization Pond Manual" (1999).

Solids Removal

DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT

Chapter 6. Industrial Pond System

2. Operation and Maintenance

2.13 Prior to the excavation or removal of solids from any wastewater pond at the facility, the Permittee shall implement measures to maintain the integrity of the pond liner during the removal process.

2.14 A water balance evaluation shall be completed on the pond within seven months of each removal action, the results of which shall be made available for MPCA review at the facility or upon request. The water balance evaluation procedure is described in the MPCA document "Prefill and Water Balance Criteria (7/89)."

2.15 Ground water quality monitoring results shall be evaluated before and after the excavation or removal to assess the potential impacts of the pond on ground water. Any significant changes shall be reported to the MPCA on the next scheduled Discharge Monitoring Report.

2.16 No impact demonstration. The requirements of parts 2.12 and/or 2.13 of this Chapter can be foregone if the Permittee can successfully demonstrate that the removal action will not impact the liner of the wastewater impoundment, or the integrity thereof. To make this demonstration, submit a Removal Plan for MPCA review and approval at least 90 days prior to the anticipated removal date. The Removal Plan should include, at a minimum, a description of the proposed methodolog(ies) to be used for the excavation or removal or solids, any proposed deviations from the water balance procedure cited in subpart a, above, and justification that the removal action does not impact the liner of the wastewater impoundment. The requirement to comply with parts 2.12 and/or 2.13 of this Chapter shall only be waived after written confirmation of approval of the Removal Plan by the Agency.

Inspection of Wastewater Ponds

2.17 The Permittee shall inspect the pond system weekly, and shall take measurements of pond water depth, estimate the coverage of aquatic plants, floating mats and ice cover on the surface of the ponds, and note odors, the condition of the dikes and the presence of muskrats. The Permittee shall maintain records of these weekly inspections for the last three (3) years, and submit the results on the Discharge Monitoring Report (DMR) supplemental form.

2.18 The Permittee shall maintain daily precipitation records.

3. Application for Permit Reissuance

3.1 By the end of each calendar five years following permit issuance, wastewater treatment ponds; related conveyances; and appurtenances to the pond system at the permitted facility shall be inspected and certified for structural integrity, complete containment, and compliance with performance standards.

3.2 The inspection and certification shall be completed by a registered professional engineer with expertise in wastewater structures.

3.3 An inspection report shall be prepared by the professional engineer and submitted with the application for permit reissuance and/or every five years, whichever comes first.

3.4 If repairs are necessary as a result of the professional engineer's inspection, a detailed proposal for restoration shall be submitted to the Agency for review within 180 days of discovery, and at least 60 days prior to initiation of restoration work.

Chapter 7. Stormwater Management

1. Authorization

1.1 This chapter authorizes the Permittee to discharge stormwater associated with industrial activity in accordance with the terms and conditions of this chapter. The MPCA may initiate modification of this chapter in accordance with Minn. R. 7001.0170 and Minn. R. 7001.0190 Subp. 1 to incorporate revised requirements in response to the reissuance or modification of the General Stormwater Permit for Industrial Activity (MNG611000).

DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT

Chapter 7. Stormwater Management

2. Prohibited Discharges

2.1 This permit, unless specifically authorized by another chapter, does not authorize the discharge of sewage, wash water, scrubber water, spills, oil, hazardous substances, or equipment/vehicle cleaning and maintenance wastewaters to ditches, wetlands or other surface waters of the state.

2.2 This permit does not authorize discharges from sites for which Environmental Assessment Worksheets or Environmental Impact Statements are required, in accordance with Minn. R. ch. 4410, until that environmental review is completed.

3. Water Quality Standards

3.1 The Permittee shall operate and maintain the facility and shall control runoff, including stormwater, from the facility to prevent the exceedance of water quality standards specified in Minnesota Rules, chs. 7050 and 7060.

3.2 The Permittee shall limit and control the use of materials at the facility that may cause exceedances of ground water standards specified in Minnesota Rules, ch. 7060. These materials include, but are not limited to, detergents and cleaning agents, solvents, chemical dust suppressants, lubricants, fuels, drilling fluids, oils, fertilizers, explosives and blasting agents.

4. Stormwater Pollution Prevention Plan

4.1 Submit a Stormwater Pollution Prevention Plan by 180 days after permit issuance.

4.2 The Permittee shall develop and implement a Stormwater Pollution Prevention Plan (Plan) to address the specific conditions at the industrial facility. The goal of the Plan is to eliminate or minimize contact of stormwater with significant materials that may result in pollution of the runoff. If contact cannot be eliminated or reduced, stormwater that has contacted significant material should be treated before it is discharged from the site.

4.3 The Plan shall be implemented at the site before the Permittee is covered under this permit.

4.4 The Stormwater Pollution Prevention Plan shall include a description of appropriate Best Management Practices for protection of surface and ground water quality at the facility, and a schedule for implementing the practices. The Plan shall also include the procedures to be followed by designated staff employed by the Permittee to implement the plan.

4.5 The Permittee shall comply with its Stormwater Pollution Prevention Plan.

Plan Contents

4.6 Complete a drainage map. The map should indicate the following items at or adjacent to the facility:

a. drainage areas and directions of stormwater runoff (indicated by arrows);

b. discharge outfalls from the site (structures that carry stormwater runoff from the facility such as ditches or storm sewers);

c. the name and location of waters of the state that receive facility stormwater runoff (if waters of the state are too distant from the facility to be indicated on the site map, indicate the name, direction and shortest distance to the lake, river, stream or wetland that receives runoff from your site);

d. areas where significant materials are exposed to stormwater;

e. locations of storm sewer inlets and an indication of which, if any, structures have floor drains or loading dock drains that are connected to storm sewers; and

f. locations and types of Best Management Practices (BMPs) currently installed at the facility to reduce or eliminate pollutants to stormwater.

Chapter 7. Stormwater Management

4. Stormwater Pollution Prevention Plan

4.7 Complete an inventory of exposed significant materials. Indicate the types of significant materials handled or stored at the site that may potentially contact stormwater. The following are examples of materials that, if exposed to stormwater, must be included in the inventory:

a. raw materials, such as fuels; solvents; petroleum products; detergents; plastic pellets; materials used in food processing or production; stockpiled sand, salt or coal;

b. by-products or intermediate products, such as wood dust, chips or bark; screened limestone, taconite or gravel by-product, recycled blacktop;

c. finished materials, such as metallic products, including scrap metal and recycled or scrap motor vehicle parts, old process equipment/machinery, taconite pellets;

d. waste products, such as ashes, sludge, solid and liquid waste, slag;

e. hazardous substances designated under section 101(14) of the Comprehensive Environmental Response Compensation and Liability Act (CERCLA);

f. any chemical the facility is required to report under section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA).

4.8 Evaluate facility areas for exposure of significant materials to stormwater. In creating the inventory of exposed significant materials, the Permittee must, at a minimum, evaluate the following areas at the industrial site (as well as other areas where appropriate) to determine whether or not significant materials are exposed in these areas:

a. vehicle and equipment maintenance, parking and storage areas including fueling and washing/cleaning areas, to determine if there is discolored soil in these areas as a result of fuel and lubricant leaks and spills;

b. liquid storage tanks and other bulk material stockpile areas;

c. loading and unloading areas;

d. outdoor manufacturing, processing or storage areas and industrial plant yards, to determine if there is discolored soil in these areas as a result of leaked or spilled solvents, fuels, or lubricants;

e. dust or particulate generating areas including dust collection devices that may release dust;

f. rooftops contaminated by industrial activity or operation of a pollution control device;

g. on-site waste disposal areas, such as waste ponds, dumpsters, solid waste storage or management areas; and

h. exposed (non-vegetated) soil areas where there is a potential for erosion to occur.

DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT

Chapter 7. Stormwater Management

4. Stormwater Pollution Prevention Plan

4.9 Describe appropriate BMPs, including structural and non-structural BMPs, that will be used at the facility to minimize or eliminate pollution of stormwater at the site. The description must include an objective for each BMP, as well as a description of how to evaluate proper functioning of the BMP and any maintenance requirements of the BMP. BMPs should target significant materials and areas identified in subparts 7 and 8 of this part. The following general categories of BMPs shall be considered and one or more shall be incorporated into the facility's Plan if significant materials are exposed to stormwater on-site:

a. Source reduction: reduce or eliminate the significant materials that are exposed to stormwater. Materials management practices should be evaluated to determine whether inventories of exposed materials can be reduced or eliminated. This can include clean-up of equipment yards, periodic checking of dust control equipment to ensure minimal accumulation of dust in the area of control equipment, removal and treatment of petroleum contaminated soil, consolidation of materials from multiple areas into one area, and training employees regarding proper handling and disposal of materials. Significant materials may also be moved indoors or covered with a tarp or structure to eliminate contact with precipitation.

b. Diversion: divert stormwater drainage away from exposed significant materials through use of curbing, berms, sewers or other forms of drainage control or elevate exposed significant material above surrounding drainage.

c. Treatment: where contact of stormwater with significant materials is unavoidable, use treatment devices to reduce the concentration and amount of pollutants in the discharge. Such devices include oil/water separators, stormwater detention/retention ponds, and vegetative swales.

4.10 Evaluate all discharge conveyances from the site (storm sewers, pipes, tile lines, ditches, etc.) to determine if liquids other than stormwater are being discharged from these devices. This should be done during dry weather when stormwater discharge is not occurring. The evaluation should cover sewer inlets and floor drains to determine which inlets/drains are connected to sanitary sewer lines, storm sewer lines, or septic tanks/drainage fields; appropriate methods such as dye or smoke testing or video imaging should be used to determine the source of discharges.

The Plan must certify that discharges from the site have been evaluated for the presence of non-stormwater discharges. The certification shall indicate the date of testing, location of testing, describe the method used to determine the source of discharges and the results of testing. Discharge of non-stormwater (such as sanitary sewer or floor drain connections to storm sewers) is not authorized by this permit; before such discharge may continue, authorization under an appropriate NPDES permit must be obtained.

4.11 Develop a preventive maintenance program. The program must require regular inspection and maintenance of stormwater management devices (e.g. cleaning oil/water separators and catch basins), as well as inspecting and testing plant equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants (e.g. hydraulic leaks, torn bag-house filters) to surface waters.

4.12 Develop a spill prevention and response procedure. In order to develop this procedure, Permittees should evaluate where spills have occurred and where they have the potential to occur. Determine drainage points for potential spill areas and develop appropriate spill prevention and containment measures, should a spill occur. Detailed procedures for cleaning-up spills shall be identified and made available to appropriate personnel. If your facility has any other spill contingency plan that satisfies the above requirements, that plan may be incorporated by reference into this Plan to satisfy this requirement.

4.13 Develop and implement an employee training program to inform appropriate personnel of the components and goals of the Plan. Training shall address spill response, good housekeeping and materials management practices. The Plan shall identify periodic dates for such training.

4.14 Identify personnel responsible for managing and implementing the Plan as well as those responsible for the reporting requirements of this permit. This should include the facility contact person as indicated on the permit application. Identified personnel must be available at reasonable times of operation.

Chapter 7. Stormwater Management

5. Temporary Protection and Permanent Cover

5.1 The Permittee shall provide and maintain temporary protection or permanent cover for the exposed areas at the facility.

5.2 Temporary protection methods are used to prevent erosion on a short-term basis, such as the placement of mulching straw, wood fiber blankets, wood chips, erosion control netting, or temporary seeding.

5.3 Permanent cover or final stabilization methods are used to prevent erosion, such as the placement of rip rap, sodding, or permanent seeding or planting. Permanent seeding and planting must have a uniform perennial vegetation cover of at least 70 percent density to constitute final stabilization.

6. Inspection and Maintenance

6.1 Site inspections shall be conducted at least once every two months throughout the calendar year. During winter months, the inspections shall be conducted during non-frozen conditions. Inspections shall be conducted by an appropriately trained personnel at the facility site, as identified in part 4.13 of this chapter. The purpose of inspections is to: 1) determine whether structural and non-structural BMPs require maintenance or changes, and 2) evaluate the completeness and accuracy of the Plan.

At least one inspection during a reporting period shall be conducted while stormwater is discharging from the facility. Inspections may be documented using an inspection form provided by the MPCA. A Storm Water Site Inspection Form is provided in the appendices section of this permit.

6.2 Inspections shall be documented and a copy of all documentation shall remain on the permitted site whenever Permittee staff are availbale on the site, and be available upon request. The inspection form developed for the General Storm Water Permit for Industrial Activity may be used for recording inspection results, and is included in the appendices section of this permit.

6.3 The following compliance items will be inspected, and documented where appropriate:

a. evaluate the facility to determine that the Plan accurately reflects site conditions as described in subpart 6 of this part, and document any inaccuracies;

b. evaluate the facility to determine whether new exposed materials have been added to the site since completion of the Plan, and document any new significant materials;

c. during the inspection conducted during the runoff event, observe the runoff to determine if it is discolored or otherwise visibly contaminated, and document observations; and,

d. determine if the non-structural and structural BMPs as indicated in the Plan are installed and functioning properly.

6.4 The Permittee shall ensure that temporary protection and permanent cover for the exposed areas at the site are maintained.

6.5 Indicate the date and time of the inspection as well as the name of the inspector on the inspection form.

6.6 When the depth of sediment collected in the final sedimentation basin above the outfall reaches one-half of the riser height, or one-half of the basin design hydraulic storage volume, the Permittee shall drain the basin and remove the sediment within sixty (60) days of discovery. No outflow from the sedimentation basin shall occur while sediment is being removed from that basin. The sediment removed from the basin shall be disposed of at a site which drains to sedimentation basin(s) at the facility.

6.7 If conditions are observed at the site that require changes in the Plan, such changes shall be made to the Plan prior to submission of the annual report for that calendar year.

6.8 The Permittee shall minimize vehicle tracking of gravel, soil or mud onto paved surfaces at the facility.

DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT

Chapter 7. Stormwater Management

6. Inspection and Maintenance

6.9 If the findings of a site inspection indicate that BMPs are not meeting the objectives as identified in subpart 9 of this part, corrective actions must be initiated within 30 days and the BMP restored to full operation as soon as field conditions allow.

6.10 The Permittee shall remove tracked material from the road surface and return it to the facility within one (1) day of discovery so that the materials drain to sedimentation basin(s) at the facility.

7. Sedimentation Basin Design and Construction

New Sedimentation Basins

7.1 Sedimentation basins shall be designed by a registered professional engineer, and installed under the direct supervision of a registered professional engineer.

7.2 The basin shall provide at least 1800 cubic feet, per acre drained, of hydraulic storage volume below the top of the outlet riser pipe.

7.3 Inlet(s) and outlet(s) shall be designed to prevent short circuiting and the discharge of floating debris.

7.4 The inlet(s) shall be placed at an elevation at least above one-half of the basin design hydraulic storage volume.

7.5 The outlet(s) shall consist of a perforated riser pipe wrapped with filter fabric and covered with crushed gravel. The perforated riser pipe shall be designed to allow complete drawdown of the basin(s).

7.6 Permanent erosion control, such as rip rap, splash pads or gabions shall be installed at the outlet(s) to prevent downstream erosion.

7.7 The basins shall be designed to allow for regular removal of accumulated sediment by a backhoe or other suitable equipment.

8. Application of Chemical Dust Suppressants

8.1 If chemical dust suppressants are applied, the Permittee shall submit a Chemical Dust Suppressant Annual Report due 31 days after the end of each calendar year following the application of a chemical dust suppressant.

8.2 The Chemical Dust Suppressant Annual Report shall include:

a. a record of the dates, methods, locations and amounts by volume of chemical application at the facility;

b. whether the product was applied in the preceding year; and,

c. the results of a chemical analysis of the materials applied each year.

8.3 If a material applied is mixed with water or another solvent before application, the chemical analysis shall be done on the aqueous or other mixture that is representative of the solution applied. This analysis shall be conducted during the same calendar year of application. This analysis shall include the parameters that may be determined by U.S. Environmental Protection Agency (EPA) Methods 624 and 625 which are described in 40 CFR Part 136.

8.4 Chemical dust suppressants, if used, shall not be applied within 100 feet of the surface receiving waters identified in the 'Facility Description' section of this permit. These materials also shall not be applied within 100 feet of ditches that conduct surface flow to the surface receiving waters identified on Page 1 of this permit.

9. Reporting

9.1 Submit a Stormwater Annual Report by March 31 of each year following permit issuance. A copy of the Stormwater Annual Report Form is provided in the appendices section of this permit.

Chapter 7. Stormwater Management

9. Reporting

9.2 The Permittee shall, upon request of the Agency, submit within a reasonable time the information and reports that are relevant to compliance with this Chapter, including the Plan, inspection reports, annual reports, original laboratory sheets from analyses conducted on the waste stream, and BMP plans and specifications.

10. Records

10.1 The Plan shall be retained for the duration of the permit. A copy of the Plan shall remain on the permitted site whenever Permittee staff are available on the site, and be available upon request. The Permittee shall maintain the following records for the period of permit coverage:

a. dates of inspections;

b. findings of inspections;

c. corrective actions taken;

d. documentation of all changes to the Plan; and,

e. a copy of annual reports.

11. Notification

11.1 If the Permittee discharges stormwater into a municipal storm sewer, the Permittee shall notify the operator of the municipal storm sewer of the existence of this permit.

12. Request for Termination of Stormwater Permit Coverage

12.1 All Permittees regulated by 40 CFR 122.26(b)(14)(i) through (ix) and (xi) may request termination of permit coverage by applying for the no exposure exclusion from permitting. The Permittee must submit (form provided by the Agency) a written certification that a condition of no exposure exists at the facility and that the facility meets the definition of no exposure of industrial activities and materials to storm water.

The application for the no exposure exclusion must be completed by the Permittee and sent to: MPCA, Industrial Storm Water Program, 520 Lafayette Rd N, St Paul, MN 55155-4194.

Failure to complete an accurate application will result in the facility being denied the no exposure exclusion from permitting. The facility must submit the application to the Agency once every five years.

12.2 The no exposure exclusion is conditional. The Permittee must maintain a condition of no exposure at the facility in order for the no exposure exclusion to remain applicable. In the event of any change or circumstance that causes exposure of industrial activities or materials to stormwater, the Permittee must comply with the stormwater requirements of this chapter.

12.3 The no exposure certification is non-transferrable. In the event that the facility operator changes, then the new operator must submit a new no exposure certification to the MPCA, Industrial Stormwater Program, 520 Lafayette Rd N, St Paul, MN 55155-4194.

12.4 The MPCA retains the authority to require the facility operator to comply with the requirements of this chapter, even when an industrial operator certifies no exposure, if the MPCA has determined that the discharge is contributing to the violation of, or interfering with the attainment or maintenance of water quality standards, including designated uses.

Chapter 7. Stormwater Management

13. Definitions

13.1 "No exposure" means all industrial materials and activities are protected by a storm resistant shelter to prevent exposure to rain, snow, snow melt, and/or runoff. Industrial activities or materials include, but are not limited to, material handling equipment or activities, industrial machinery, raw materials, intermediate products, by-products, final products, or waste products.

13.2 "Non-stormwater discharge" means any discharge not comprised entirely of stormwater discharges authorized by a NPDES permit.

13.3 "Runoff" means any liquid that drains over land from any part of a facility.

Chapter 8. Total Facility Requirements

1. General Requirements

General Requirements

1.1 Incorporation by Reference. The following applicable federal and state laws are incorporated by reference in this permit, are applicable to the Permittee, and are enforceable parts of this permit: 40 CFR pts. 122.41, 122.42, 136, 403 and 503; Minn. R. pts. 7001, 7041, 7045, 7050, 7052, 7053, 7060, and 7080; and Minn. Stat. Sec. 115 and 116.

1.2 Permittee Responsibility. The Permittee shall perform the actions or conduct the activity authorized by the permit in compliance with the conditions of the permit and, if required, in accordance with the plans and specifications approved by the Agency. (Minn. R. 7001.0150, subp. 3, item E)

1.3 Toxic Discharges Prohibited. Whether or not this permit includes effluent limitations for toxic pollutants, the Permittee shall not discharge a toxic pollutant except according to Code of Federal Regulations, Title 40, sections 400 to 460 and Minnesota Rules 7050, 7052, 7053 and any other applicable MPCA rules. (Minn. R. 7001.1090, subp.1, item A)

1.4 Nuisance Conditions Prohibited. The Permittee's discharge shall not cause any nuisance conditions including, but not limited to: floating solids, scum and visible oil film, acutely toxic conditions to aquatic life, or other adverse impact on the receiving water. (Minn. R. 7050.0210 subp. 2)

1.5 Property Rights. This permit does not convey a property right or an exclusive privilege. (Minn. R. 7001.0150, subp. 3, item C)

1.6 Liability Exemption. In issuing this permit, the state and the MPCA assume no responsibility for damage to persons, property, or the environment caused by the activities of the Permittee in the conduct of its actions, including those activities authorized, directed, or undertaken under this permit. To the extent the state and the MPCA may be liable for the activities of its employees, that liability is explicitly limited to that provided in the Tort Claims Act. (Minn. R. 7001.0150, subp. 3, item O)

1.7 The MPCA's issuance of this permit does not obligate the MPCA to enforce local laws, rules, or plans beyond what is authorized by Minnesota Statutes. (Minn. R. 7001.0150, subp.3, item D)

1.8 Liabilities. The MPCA's issuance of this permit does not release the Permittee from any liability, penalty or duty imposed by Minnesota or federal statutes or rules or local ordinances, except the obligation to obtain the permit. (Minn. R. 7001.0150, subp.3, item A)

1.9 The issuance of this permit does not prevent the future adoption by the MPCA of pollution control rules, standards, or orders more stringent than those now in existence and does not prevent the enforcement of these rules, standards, or orders against the Permittee. (Minn. R. 7001.0150, subp.3, item B)

Chapter 8. Total Facility Requirements

1. General Requirements

1.10 Severability. The provisions of this permit are severable and, if any provisions of this permit or the application of any provision of this permit to any circumstance are held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby.

1.11 Compliance with Other Rules and Statutes. The Permittee shall comply with all applicable air quality, solid waste, and hazardous waste statutes and rules in the operation and maintenance of the facility.

1.12 Inspection and Entry. When authorized by Minn. Stat. Sec. 115.04; 115B.17, subd. 4; and 116.091, and upon presentation of proper credentials, the agency, or an authorized employee or agent of the agency, shall be allowed by the Permittee to enter at reasonable times upon the property of the Permittee to examine and copy books, papers, records, or memoranda pertaining to the construction, modification, or operation of the facility covered by the permit or pertaining to the activity covered by the permit; and to conduct surveys and investigations, including sampling or monitoring, pertaining to the construction, modification, or operation of the facility covered by the permit or pertaining to the activity covered by the permit. (Minn. R. 7001.0150, subp.3, item I)

1.13 Control Users. The Permittee shall regulate the users of its wastewater treatment facility so as to prevent the introduction of pollutants or materials that may result in the inhibition or disruption of the conveyance system, treatment facility or processes, or disposal system that would contribute to the violation of the conditions of this permit or any federal, state or local law or regulation.

Sampling

1.14 Representative Sampling. Samples and measurements required by this permit shall be conducted as specified in this permit and shall be representative of the discharge or monitored activity. (40 CFR 122.41 (j)(1))

1.15 Additional Sampling. If the Permittee monitors more frequently than required, the results and the frequency of monitoring shall be reported on the Discharge Monitoring Report (DMR) or another MPCA-approved form for that reporting period. (Minn. R. 7001.1090, subp. 1, item E)

1.16 Certified Laboratory. A laboratory certified by the Minnesota Department of Health shall conduct analyses required by this permit. Analyses of dissolved oxygen, pH, temperature, specific conductance, and total residual oxidants (chlorine, bromine) do not need to be completed by a certified laboratory but shall comply with manufacturers specifications for equipment calibration and use. (Minn. Stat. Sec. 144.97 through 144.98 and Minn. R. 4740.2010 and 4740.2050 through 4740.2120) (Minn. R. 4740.2010 and 4740.2050 through 2120)

1.17 Sample Preservation and Procedure. Sample preservation and test procedures for the analysis of pollutants shall conform to 40 CFR Part 136 and Minn. R. 7041.3200.

1.18 Equipment Calibration: Flow meters, pumps, flumes, lift stations or other flow monitoring equipment used for purposes of determining compliance with permit shall be checked and/or calibrated for accuracy at least twice annually. (Minn. R. 7001.0150, subp. 2, items B and C)

Chapter 8. Total Facility Requirements

1. General Requirements

1.19 Maintain Records. The Permittee shall keep the records required by this permit for at least three years, including any calculations, original recordings from automatic monitoring instruments, and laboratory sheets. The Permittee shall extend these record retention periods upon request of the MPCA. The Permittee shall maintain records for each sample and measurement. The records shall include the following information (Minn. R. 7001.0150, subp. 2, item C):

a. The exact place, date, and time of the sample or measurement;

b. The date of analysis;

c. The name of the person who performed the sample collection, measurement, analysis, or calculation; and

d. The analytical techniques, procedures and methods used; and

e. The results of the analysis.

1.20 Completing Reports. The Permittee shall submit the results of the required sampling and monitoring activities on the forms provided, specified, or approved by the MPCA. The information shall be recorded in the specified areas on those forms and in the units specified. (Minn. R. 7001.1090, subp. 1, item D; Minn. R. 7001.0150, subp. 2, item B)

Required forms may include:

DMR Supplemental Form
Individual values for each sample and measurement must be recorded on the DMR Supplemental Form which, if required, will be provided by the MPCA. DMR Supplemental Forms shall be submitted with the appropriate DMRs. You may design and use your own supplemental form; however it must be approved by the MPCA. Note: Required summary information MUST also be recorded on the DMR. Summary information that is submitted ONLY on the DMR Supplemental Form does not comply with the reporting requirements.

1.21 Submitting Reports. DMRs and Supplementals shall be submitted to:

MPCA
Attn: Discharge Monitoring Reports
520 Lafayette Road North
St. Paul, Minnesota 55155-4194.

DMRs, DMR supplemental forms and related attachments may be electronically submitted via the MPCA Online Services Portal after authorization is approved. When electronically submitted, the paper DMR submittal requirement is waived.

DMRs and DMR Supplemental Forms shall be postmarked or electronically submitted by the 21st day of the month following the sampling period or as otherwise specified in this permit. Electronic DMR submittal must be complete on or before 11:59 PM of the 21st day of the month following the sampling period or as otherwise specified in this permit. A DMR shall be submitted for each required station even if no discharge occurred during the reporting period. (Minn. R. 7001.0150, subps. 2.B and 3.H)

Other reports required by this permit shall be postmarked by the date specified in the permit to:

MPCA
Attn: WQ Submittals Center
520 Lafayette Road North
St. Paul, Minnesota 55155-4194

Chapter 8. Total Facility Requirements

1. General Requirements

1.22 Incomplete or Incorrect Reports. The Permittee shall immediately submit an amended report or DMR to the MPCA upon discovery by the Permittee or notification by the MPCA that it has submitted an incomplete or incorrect report or DMR. The amended report or DMR shall contain the missing or corrected data along with a cover letter explaining the circumstances of the incomplete or incorrect report. (Minn. R. 7001.0150 subp. 3, item G)

1.23 Required Signatures. All DMRs, forms, reports, and other documents submitted to the MPCA shall be signed by the Permittee or the duly authorized representative of the Permittee. Minn. R. 7001.0150, subp. 2, item D. The person or persons that sign the DMRs, forms, reports or other documents must certify that he or she understands and complies with the certification requirements of Minn. R. 7001.0070 and 7001.0540, including the penalties for submitting false information. Technical documents, such as design drawings and specifications and engineering studies required to be submitted as part of a permit application or by permit conditions, must be certified by a registered professional engineer. (Minn. R. 7001.0540)

1.24 Detection Level. The Permittee shall report monitoring results below the reporting limit (RL) of a particular instrument as "<" the value of the RL. For example, if an instrument has a RL of 0.1 mg/L and a parameter is not detected at a value of 0.1 mg/L or greater, the concentration shall be reported as "<0.1 mg/L." "Non-detected," "undetected," "below detection limit," and "zero" are unacceptable reporting results, and are permit reporting violations. (Minn. R. 7001.0150, subp. 2, item B)

Where sample values are less than the level of detection and the permit requires reporting of an average, the Permittee shall calculate the average as follows:

a. If one or more values are greater than the level of detection, substitute zero for all nondetectable values to use in the average calculation.

b. If all values are below the level of detection, report the averages as "<" the corresponding level of detection.

c. Where one or more sample values are less than the level of detection, and the permit requires reporting of a mass, usually expressed as kg/day, the Permittee shall substitute zero for all nondetectable values. (Minn. R. 7001.0150, subp. 2, item B)

1.25 Records. The Permittee shall, when requested by the Agency, submit within a reasonable time the information and reports that are relevant to the control of pollution regarding the construction, modification, or operation of the facility covered by the permit or regarding the conduct of the activity covered by the permit. (Minn. R. 7001.0150, subp. 3, item H)

1.26 Confidential Information. Except for data determined to be confidential according to Minn. Stat. Sec. 116.075, subd. 2, all reports required by this permit shall be available for public inspection. Effluent data shall not be considered confidential. To request the Agency maintain data as confidential, the Permittee must follow Minn. R. 7000.1300.

Noncompliance and Enforcement

1.27 Subject to Enforcement Action and Penalties. Noncompliance with a term or condition of this permit subjects the Permittee to penalties provided by federal and state law set forth in section 309 of the Clean Water Act; United States Code, title 33, section 1319, as amended; and in Minn. Stat. Sec. 115.071 and 116.072, including monetary penalties, imprisonment, or both. (Minn. R. 7001.1090, subp. 1, item B)

1.28 Criminal Activity. The Permittee may not knowingly make a false statement, representation, or certification in a record or other document submitted to the Agency. A person who falsifies a report or document submitted to the Agency, or tampers with, or knowingly renders inaccurate a monitoring device or method required to be maintained under this permit is subject to criminal and civil penalties provided by federal and state law. (Minn. R. 7001.0150, subp.3, item G., 7001.1090, subps. 1, items G and H and Minn. Stat. Sec. 609.671)

Chapter 8. Total Facility Requirements

1. General Requirements

1.29 Noncompliance Defense. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. (40 CFR 122.41(c))

1.30 Effluent Violations. If sampling by the Permittee indicates a violation of any discharge limitation specified in this permit, the Permittee shall immediately make every effort to verify the violation by collecting additional samples, if appropriate, investigate the cause of the violation, and take action to prevent future violations. If the permittee discovers that noncompliance with a condition of the permit has occurred which could endanger human health, public drinking water supplies, or the environment, the Permittee shall within 24 hours of the discovery of the noncompliance, orally notify the commissioner and submit a written description of the noncompliance within 5 days of the discovery. The written description shall include items a. through e., as listed below. If the Permittee discovers other non-compliance that does not explicitly endanger human health, public drinking water supplies, or the environment, the non-compliance shall be reported during the next reporting period to the MPCA with its Discharge Monitoring Report (DMR). If no DMR is required within 30 days, the Permittee shall submit a written report within 30 days of the discovery of the noncompliance. This description shall include the following information:

a. a description of the event including volume, duration, monitoring results and receiving waters;

b. the cause of the event;

c. the steps taken to reduce, eliminate and prevent reoccurrence of the event;

d. the exact dates and times of the event; and

e. steps taken to reduce any adverse impact resulting from the event. (Minn. R. 7001.0150, subp. 3k)

1.31 Unauthorized Releases of Wastewater Prohibited. Except for conditions specifically described in Minn. R. 7001.1090, subp. 1, items J and K, all unauthorized bypasses, overflows, discharges, spills, or other releases of wastewater or materials to the environment, whether intentional or not, are prohibited. However, the MPCA will consider the Permittee's compliance with permit requirements, frequency of release, quantity, type, location, and other relevant factors when determining appropriate action. (40 CFR 122.41 and Minn. Stat. Sec 115.061)

Chapter 8. Total Facility Requirements

1. General Requirements

1.32 Discovery of a release. Upon discovery of a release, the Permittee shall:

a. Take all reasonable steps to immediately end the release.

b. Notify the Minnesota Department of Public Safety Duty Officer at 1(800)422-0798 or (651)649-5451 (metro area) immediately upon discovery of the release. You may contact the MPCA during business hours at 1(800)657-3864 or (651)296-6300 (metro area).

c. Recover as rapidly and as thoroughly as possible all substances and materials released or immediately take other action as may be reasonably possible to minimize or abate pollution to waters of the state or potential impacts to human health caused thereby. If the released materials or substances cannot be immediately or completely recovered, the Permittee shall contact the MPCA. If directed by the MPCA, the Permittee shall consult with other local, state or federal agencies (such as the Minnesota Department of Natural Resources and/or the Wetland Conservation Act authority) for implementation of additional clean-up or remediation activities in wetland or other sensitive areas.

d. Collect representative samples of the release. The Permittee shall sample the release for parameters of concern immediately following discovery of the release. The Permittee may contact the MPCA during business hours to discuss the sampling parameters and protocol. In addition, Fecal Coliform Bacteria samples shall be collected where it is determined by the Permittee that the release contains or may contain sewage. If the release cannot be immediately stopped, the Permittee shall consult with MPCA regarding additional sampling requirements. Samples shall be collected at least, but not limited to, two times per week for as long as the release continues.

e. Submit the sampling results as directed by the MPCA. At a minimum, the results shall be submitted to the MPCA with the next DMR.

1.33 Upset Defense. In the event of temporary noncompliance by the Permittee with an applicable effluent limitation resulting from an upset at the Permittee's facility due to factors beyond the control of the Permittee, the Permittee has an affirmative defense to an enforcement action brought by the Agency as a result of the noncompliance if the Permittee demonstrates by a preponderance of competent evidence:

a. The specific cause of the upset;

b. That the upset was unintentional;

c. That the upset resulted from factors beyond the reasonable control of the Permittee and did not result from operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or increases in production which are beyond the design capability of the treatment facilities;

d. That at the time of the upset the facility was being properly operated;

e. That the Permittee properly notified the Commissioner of the upset in accordance with Minn. R. 7001.1090, subp. 1, item I; and

f. That the Permittee implemented the remedial measures required by Minn. R. 7001.0150, subp. 3, item J.

Operation and Maintenance

Chapter 8. Total Facility Requirements

1. General Requirements

1.34 The Permittee shall at all times properly operate and maintain the facilities and systems of treatment and control, and the appurtenances related to them which are installed or used by the Permittee to achieve compliance with the conditions of the permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. The Permittee shall install and maintain appropriate backup or auxiliary facilities if they are necessary to achieve compliance with the conditions of the permit and, for all permits other than hazardous waste facility permits, if these backup or auxiliary facilities are technically and economically feasible Minn. R. 7001.0150. subp. 3, item F.

1.35 In the event of a reduction or loss of effective treatment of wastewater at the facility, the Permittee shall control production or curtail its discharges to the extent necessary to maintain compliance with the terms and conditions of this permit. The Permittee shall continue this control or curtailment until the wastewater treatment facility has been restored or until an alternative method of treatment is provided. (Minn. R. 7001.1090, subp. 1, item C)

1.36 Solids Management. The Permittee shall properly store, transport, and dispose of biosolids, septage, sediments, residual solids, filter backwash, screenings, oil, grease, and other substances so that pollutants do not enter surface waters or ground waters of the state. Solids should be disposed of in accordance with local, state and federal requirements. (40 CFR 503 and Minn. R. 7041 and applicable federal and state solid waste rules)

1.37 Scheduled Maintenance. The Permittee shall schedule maintenance of the treatment works during non-critical water quality periods to prevent degradation of water quality, except where emergency maintenance is required to prevent a condition that would be detrimental to water quality or human health. (Minn. R. 7001.0150. subp. 3, item F and Minn. R. 7001.0150. subp. 2, item B)

1.38 Control Tests. In-plant control tests shall be conducted at a frequency adequate to ensure compliance with the conditions of this permit. (Minn. R. 7001.0150. subp. 3, item F and Minn. R. 7001.0150. subp. 2, item B)

Changes to the Facility or Permit

1.39 Permit Modifications. Except as provided under Minnesota Statutes, section 115.07, subdivisions 1 and 3, no person required by statute or rule to obtain a permit may construct, install, modify, or operate the facility to be permitted, nor shall a person commence an activity for which a permit is required by statute or rule until the agency has issued a written permit for the facility or activity. (Minn. R. 7001.0030)

Permittees that propose to make a change to the facility or discharge that requires a permit modification must follow Minn. R. 7001.0190. If the Permittee cannot determine whether a permit modification is needed, the Permittee must contact the MPCA prior to any action. It is recommended that the application for permit modification be submitted to the MPCA at least 180 days prior to the planned change.

1.40 No person required by statute or rule to obtain a permit may construct, install, modify, or operate the facility to be permitted except as provided under Minnesota Statutes, section 115.07, subdivisions 1 and 3, nor shall a person commence an activity for which a permit is required by statute or rule until the agency has issued a written permit for the facility or activity.

1.41 Plans, specifications and MPCA approval are not necessary when maintenance dictates the need for installation of new equipment, provided the equipment is the same design size and has the same design intent. For instance, a broken pipe, lift station pump, aerator, or blower can be replaced with the same design-sized equipment without MPCA approval.

If the proposed construction is not expressly authorized by this permit, it may require a permit modification. If the construction project requires an Environmental Assessment Worksheet under Minn. R. 4410, no construction shall begin until a negative declaration is issued and all approvals are received or implemented.

Chapter 8. Total Facility Requirements

1. General Requirements

1.42 Report Changes. The Permittee shall give advance notice as soon as possible to the MPCA of any substantial changes in operational procedures, activities that may alter the nature or frequency of the discharge, and/or material factors that may affect compliance with the conditions of this permit. (Minn. R. 7001.0150, subp. 3, item M)

1.43 Chemical Additives. The Permittee shall receive prior written approval from the MPCA before increasing the use of a chemical additive authorized by this permit, or using a chemical additive not authorized by this permit, in quantities or concentrations that have the potential to change the characteristics, nature and/or quality of the discharge.

The Permittee shall request approval for an increased or new use of a chemical additive at least 60 days, or as soon as possible, before the proposed increased or new use.

This written request shall include at least the following information for the proposed additive:

a. The process for which the additive will be used;
b. Material Safety Data Sheet (MSDS) which shall include aquatic toxicity, human health, and environmental fate information for the proposed additive. The aquatic toxicity information shall include at minimum the results of: a) a 48-hour LC50 or EC50 acute study for a North American freshwater planktonic crustacean (either Ceriodaphnia or Daphnia sp.) and b) a 96-hour LC50 acute study for rainbow trout, bluegill or fathead minnow or another North American freshwater aquatic species other than a planktonic crustacean;
c. A complete product use and instruction label;
d. The commercial and chemical names and Chemical Abstract Survey (CAS) number for all ingredients in the additive (If the MSDS does not include information on chemical composition, including percentages for each ingredient totaling to 100%, the Permittee shall contact the supplier to have this information provided); and
e. The proposed method of application, application frequency, concentration, and daily average and maximum rates of use. (Minn. R. 7001.0170)

1.44 Upon review of the information submitted regarding the proposed chemical additive, the MPCA may require additional information be submitted for consideration. This permit may be modified to restrict the use or discharge of a chemical additive and include additional influent and effluent monitoring requirements.

Approval for the use of an additive shall not justify the exceedance of any effluent limitation nor shall it be used as a defense against pollutant levels in the discharge causing or contributing to the violation of a water quality standard.

1.45 MPCA Initiated Permit Modification, Suspension, or Revocation. The MPCA may modify or revoke and reissue this permit pursuant to Minn. R. 7001.0170. The MPCA may revoke without reissuance this permit pursuant to Minn. R. 7001.0180.

1.46 TMDL Impacts. Facilities that discharge to an impaired surface water, watershed or drainage basin may be required to comply with additional permits or permit requirements, including additional restriction or relaxation of limits and monitoring as authorized by the CWA 303(d)(4)(A) and 40 CFR 122.44.l.2.i., necessary to ensure consistency with the assumptions and requirements of any applicable US EPA approved wasteload allocations resulting from Total Maximum Daily Load (TMDL) studies.

1.47 Permit Transfer. The permit is not transferable to any person without the express written approval of the Agency after compliance with the requirements of Minn. R. 7001.0190. A person to whom the permit has been transferred shall comply with the conditions of the permit. (Minn. R., 7001.0150, subp. 3, item N)

Chapter 8. Total Facility Requirements

1. General Requirements

1.48 Facility Closure. The Permittee is responsible for closure and post-closure care of the facility. The Permittee shall notify the MPCA of a significant reduction or cessation of the activities described in this permit at least 180 days before the reduction or cessation. The MPCA may require the Permittee to provide to the MPCA a facility Closure Plan for approval.

Facility closure that could result in a potential long-term water quality concern, such as the ongoing discharge of wastewater to surface or ground water, may require a permit modification or reissuance.

The MPCA may require the Permittee to establish and maintain financial assurance to ensure performance of certain obligations under this permit, including closure, post-closure care and remedial action at the facility. If financial assurance is required, the amount and type of financial assurance, and proposed modifications to previously MPCA-approved financial assurance, shall be approved by the MPCA. (Minn. Stat. Sec. 116.07, subd. 4)

1.49 Permit Reissuance. If the Permittee desires to continue permit coverage beyond the date of permit expiration, the Permittee shall submit an application for reissuance at least 180 days before permit expiration. If the Permittee does not intend to continue the activities authorized by this permit after the expiration date of this permit, the Permittee shall notify the MPCA in writing at least 180 days before permit expiration.

If the Permittee has submitted a timely application for permit reissuance, the Permittee may continue to conduct the activities authorized by this permit, in compliance with the requirements of this permit, until the MPCA takes final action on the application, unless the MPCA determines any of the following (Minn. R. 7001.0040 and 7001.0160):

a. The Permittee is not in substantial compliance with the requirements of this permit, or with a stipulation agreement or compliance schedule designed to bring the Permittee into compliance with this permit;

b. The MPCA, as a result of an action or failure to act by the Permittee, has been unable to take final action on the application on or before the expiration date of the permit;

c. The Permittee has submitted an application with major deficiencies or has failed to properly supplement the application in a timely manner after being informed of deficiencies.