



Minnesota Pollution Control Agency

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Solid Waste Management Facility Permit

Permit: SW-282

SMBSC Lime Storage Unit - LSU

Action: PER002

In accordance with Minn. Stat. chs. 115, 115A, and 116, and Minn. Rules chs. 7000, 7001, and 7035, the Minnesota Pollution Control Agency (MPCA) hereby issues this permit and authorizes the permittee(s) listed on the following page to construct and operate the SMBSC Lime Storage Unit - LSU, SW-282 under the conditions set forth in this permit.

The facility consists of 52 acres located in: Township 116 N, Range 36 W, Section 34, Renville County, in the MPCA Marshall Region. The facility includes the following waste activity area(s):

Industrial Waste Disposal Area	IL001
Industrial Waste Disposal Area	IL002

The determination to issue this permit is discretionary with the MPCA and was made subsequent to MPCA staff review of the permit application. The term commissioner, as used in this permit, refers to the MPCA Commissioner or MPCA personnel who have been delegated explicit authority by the commissioner. Other terms used in this permit are defined in Minnesota Statutes, the MPCA Solid Waste Management Rules, or specifically defined in this permit.

Permit Issuance Date: _____

Permit Expiration Date: _____

Permit Modified Date: _____

Minnesota Pollution Control Agency

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Supervisor, Land Permits Unit

Land & Air Compliance Section

Industrial Division

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Solid Waste Management Facility Permit

SMBSC Lime Storage Unit - LSU

Permit: SW-282

Action: PER002

The following permittee(s) are authorized to construct and operate the SMBSC Lime Storage Unit - LSU, SW-282 under the conditions set forth in this permit.

Permittee Activity Owner:

Southern Minnesota Beet Sugar Cooperative

Address:

PO Box 500
Renville, MN 562840500

Permittee Land Owner:

Southern Minnesota Beet Sugar Cooperative

Address:

PO Box 500
Renville, MN 562840500

Permittee Operator:

Southern Minnesota Beet Sugar Cooperative

Address:

PO Box 500
Renville, MN 562840500

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1. TOTAL FACILITY

1.1 General

1.1.1 Definitions

- 1.1.2 "Airspace" means the volume for filling with waste, considering all solid waste, daily, intermediate, intermittent and final cover materials, and design restrictions.
- 1.1.3 "Design Capacity" means the maximum estimated potential airspace to be occupied by a land disposal facility, including all cover systems. "Design capacity" is used only for planning purposes and is distinct from permitted capacity. "Design capacity" is an estimate dependent on the existing landholdings of the Permittee, existing regulations that affect development and design (including required buffer areas, storm water management requirements, and slopes), engineering designs, and site developmental plans. It includes all areas that have been completed, all active areas, and all proposed areas based on the largest design footprint shown on the plan sheets. It is the volume that, upon final closure of the facility, would be occupied by waste (along with all associated materials including cover) measured from the base of the fill to the top of the proposed final cover. No waste disposal is authorized until the MPCA grants "permitted capacity" as defined below.
- 1.1.4 "Facility" has the meaning given in Minn. R. 7035.0300, subp. 37.
- 1.1.5 "Former Mud Pond" for the purposes of this permit refers to 35 acre area adjacent to the Lime Storage Unit (LSU) in the south 1/4 of the south 1/4 of NE 1/4 and the North 1/4 of the NE 1/4 of the SE 1/4 of Section 3, T115N, R36W, in which mud solids from the Sugar Beet Processing Plant's beet wash loop were historically disposed.
- 1.1.6 "LSU" for the purposes of this permit means Lime Storage Unit.
- 1.1.7 "PCC" means Precipitated Calcium Carbonate which is formed as a precipitate in the thin juice purification process at the sugar beet processing plant.
- 1.1.8 "Permitted Capacity" means the total airspace volume in cubic yards allowed for disposal at the facility under the most recently issued permit. It includes airspace already filled by previous disposal activities, before the start of the permit; estimated fill volumes to be used during the five-year term of the current permit, including cover systems; and may also include estimated fill volumes and cover systems that would be used during an additional "follow-on" period extending up to five years past the current permit's expiration date, provided that the Permittee has submitted detailed engineering plans for the use and closure of that follow-on disposal space.
- 1.1.9 "Permittee" means the Southern Minnesota Beet Sugar Cooperative.
- 1.1.10 "Sugar Beet Processing Plant" for the purposes of this permit means the Southern Minnesota Beet Sugar Cooperative sugar beet processing plant in Renville, Minnesota.
- 1.1.11 "Tare 2" for the purposes of this permit means solid waste that is a mixture of topsoil and beet fiber produced at the sugar beet processing plant during the initial processing of beets and generally has been found to contain less than 2% beet parts.

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- 1.1.12 "Waste Activity" means the storage, processing, transfer, utilization, treatment, or disposal of solid waste and waste by-products.
- 1.1.13 "Waste Activity Area" means the land, structures, monitoring devices, and other appurtenances and improvements on the land associated with a waste activity.

1.1.14 Location

- 1.1.15 The Southern Minnesota Beet Sugar Cooperative (SMBSC) Sugar Beet Processing Plant is located one mile east of the city of Renville, Minnesota on Highway 212 on a 640 acre site. The Facility authorized by this permit occupies a 65 acre portion of the Permittee's sugar beet processing plant site. The Facility is located in the SW 1/4 of Section 3, T115N, R36W, Emmet Township, Renville County, Minnesota.

1.1.16 Description: Facility Operations

- 1.1.17 This Facility is the LSU, PCC storage areas and related appurtenances for the Sugar Beet Processing Plant within the influence of the environmental monitoring systems established by this permit. The Facility is designed, constructed and operated to comply with the terms and conditions of this permit. The LSU provides for disposal and or storage of PCC and has a footprint of approximately 38 acres with a potential footprint of 52 acres.
- 1.1.18 The Permittee has operated the Sugar Beet Processing Plant since the late 1970's. Beets are harvested during the annual beet campaign which usually begins in September each year and extends through April of the following year. The Sugar Beet Processing Plant's principal products are beet sugar, beet pulp pellets, and molasses by-products.
- 1.1.19 During the seasonal beet campaign PCC is formed as part of the thin juice purification process. This process removes impurities in the sugar juice and is similar to lime treatment which is used to purify drinking water. PCC is processed through plate and frame filters, which typically yield a dry filter cake of about 70% solids by weight.
- 1.1.20 The existing LSU is located south of the Sugar Beet Processing Plant site on what was formerly the spent lime slurry pond. Slurrying of the PCC ended in 1997 when a plate and frame filter press system was installed to remove water from the PCC prior to disposal. Implementation of the dry system reduces the water content of PCC to approximately 30% by weight. Dry PCC cake is transported in dump trucks for disposal or storage at the LSU.
- 1.1.21 In addition to PCC, the Permittee uses Tare 2 at the LSU. A previous mud solids slurry process was discontinued in September 1999 in favor of the use of centrifuges to more adequately dewater the mud solids. The centrifuges have made it possible to use Tare 2 for construction projects as authorized by this permit, and Solid Waste Permit SW-562..

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1.1.22 Description: Agricultural Liming Agent

- 1.1.23 PCC is classified as a by-product of lime in accordance with Minnesota Department of Agriculture requirements and Minnesota Pollution Control Agency solid waste rules. This classification allows PCC to be used as a liming agent on Minnesota cropland. Since 2002, essentially all the PCC generated at the sugar beet processing plant has been put to beneficial use as an agricultural liming agent (Ag-lime), soil enhancement agent and fertilizer.
- 1.1.24 PCC used as an Ag-lime agent is either loaded from the processing plant filter press area or transported to the LSU for temporary storage until it can be loaded onto trucks for application. Ag-lime is loaded all year with maximum use on a crop seasonal basis corresponding to pre-planting and post harvest months. Ag-lime users pick up the PCC and deliver it to the fields for application.

1.1.25 Description: Waste Activities

- 1.1.26 This permit authorizes the disposal of PCC and Tare 2 in the fill area. The facility waste activities authorized by this permit are limited to those activities and are further described in the Waste Capacity Table of this permit. This permit continues authorization to operate the existing LSU and the Phase 1 development on an as-needed basis dependent on the market for PCC as an Ag-lime substitute. The development plan is further discussed in the documents listed in the Documents Section of this permit.
- 1.1.27 As of November 2010, there were approximately 1,400,000 cubic yards of PCC, Tare 2 and cover soils within the LSU. If the use of PCC as an agricultural liming agent were completely discontinued, the existing disposal capacity would accommodate approximately ten years of PCC disposal.

The approved fill area of the existing LSU is comprised of four cells constructed on top of the existing disposal/storage area. Any expansion will begin beyond the Phase 1 development as described below for the Phase 2 expansion. The top elevation remains at 1162 feet and the fill is designed to expand to the west avoiding the neighboring Soil Processing Unit. Dry mud solids will continue to be stockpiled in the LSU to be used in construction and as intermittent, intermediate and final cover material. Final cover will be placed according to the Construction Plans once the fill reaches final elevations.

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- 1.1.28 Contact stormwater from the interior of the fill is collected at two locations:
1. The contact water basin located on top of the LSU (LSU Open Water Cells)
 2. The south stormwater pond (collection pond)

These ponds are connected by pipelines and pumps to allow water transfer for pond level maintenance. The lower south stormwater pond has a pump to transfer water via force main to the storage ponds of the Wastewater Treatment System for storage, reuse or disposal.

The completed final cover construction provides for non-contact runoff control and management using ditches, diversion berms, drain lines and basins. Non-contact stormwater runoff from the final cover on the north, west and south slopes is contained by toe berms and diverted to the west by grass lined ditches that discharge into the west sedimentation basin ((carried by a below grade drain pipe (let-down pipe))).

- 1.1.29 With the issuance of this permit, the May 2011 plans and specifications for Phase development are approved for construction.

1.1.30 Description: Phase 2 Expansion (Proposed)

- 1.1.31 The Permittee has proposed a revised expansion plan that is in keeping with the Ultimate Capacity of the facility conceptual design. The Phase 2 layout shown on the current approved permit drawings (see March 1, 2004, Drawing C-03-P) has been modified from the previous concepts. Phase 2 is only proposed and is not open for active filling. In addition, and since wetlands are present within the revised Phase 2 foot print (see Drawing C-03-P), a wetland replacement plan meeting the requirements of the Minnesota's Wetland Conservation Act must be obtained before Phase 2 can be implemented. Stormwater must be collected and returned to the wastewater treatment system for treatment and disposal.

1.1.32 Description: Former Mud Pond Administration

- 1.1.33 In a Consent Decree by and among the Minnesota Pollution Control Agency (MPCA), the Minnesota Department of Natural Resources and the Permittee, dated January 18, 2002, the Permittee implemented Former Mud Pond (FMP) closure requirements including the construction and certification of a mud pond cover (installed in 2007 in accordance with MPCA approved plans and permit requirements) and continued groundwater monitoring under this permit to evaluate effectiveness of the FMP closure (2010). The Consent Decree was terminated on January 12, 2007 following completion of the specified requirements.
- 1.1.34 To facilitate closure of the Consent Decree and coordination of closure of the FMP with the operation and monitoring of the adjacent LSU, this permit imposes certain monitoring and evaluation requirements related to the FMP.

With issuance of the previous permit dated August 9, 1999, the final plans and specifications were approved for construction of the Phase 1 development.

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1.1.35 Description: Phase 2 Expansion (as proposed in the application)

1.1.36 There are no changes proposed for the LSU Phase 1 fill limit that is authorized by this permit. With this permit application, SMBSC has proposed a revised expansion plan for Phase 2 that is in keeping with the Ultimate Capacity of the Facility conceptual design. The previously approved Phase 2 design is shown on the March 2004 permit application (Drawing C-03-P). Drawing C-03-P has been revised with this permit application to show the most recent conceptual design for Phase 2 which is intended accommodate the Soil Processing Unit design permitted in August 2009. Since wetlands are present within the revised Phase 2 footprint (see Drawing C-03-P), a wetland replacement plan meeting the requirements of the Minnesota's Wetland Conservation Act must be obtained before Phase 2 construction can be approved by the MPCA.

1.1.37 Description: January 18, 2002 Consent Decree Background

1.1.38 To close a Consent Decree by and among the MPCA, the Minnesota Department of Natural Resources and the Permittee, dated January 18, 2002, the Permittee implemented FMP closure requirements including construction and certification of the mud pond cover installed according the MPCA approved plan and permit requirements in 2007 and further hydrologic evaluation of the installed cover reported with the Annual reports 2008-2010.

To facilitate closure of the Consent Decree in 2006 and coordinate closure of the FMP with the operation and monitoring of the adjacent LSU, this permit imposes certain monitoring and evaluation requirements related to the FMP. The groundwater monitoring systems described and established by this permit, the Consent Decree and previous permits are part of the monitoring network which is necessary to establish the effectiveness of these requirements.

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1.1.39 Description: Groundwater Monitoring Well MW-6 (changed to 6A)

1.1.40 The Corrective Action Evaluation Report dated April 1999, prepared by Barr Engineering determined that monitoring well MW-6, as located in the previous permit, has been impacted by runoff from an adjacent coal storage area. MW-6 was periodically dry, and was decommissioned and replaced by MW-6A in spring 2006.

Groundwater flow in the vicinity of MW-6A may be influenced by a high capacity water intake supply well used by the sugar beet processing plant. Monitoring well MW-6A is primarily used to evaluate the influence of coal pile runoff on the groundwater, which persists despite additional runoff control measures.

1.1.41 Description: Groundwater Monitoring Related to Coal Ash Use

1.1.42 Precipitated Calcium Carbonate (PCC & beet lime) is a fine grained mineral product. PCC is land spread as a liming agent, soil enhancer and fertilizer in agricultural fields, fields producing feeds, foods for human consumption, etc. MPCA has granted a standing beneficial end-use for beet lime as an agricultural liming material. PCC has been tested and approved for this application, and it continues to be monitored by MPCA and MDA. The MPCA in this reissuance of Permit SW-282 is requiring SMBSC to conduct further, ongoing, chemical characterization of PCC.

MPCA's 2002 Consent Order required SMBSC to investigate the FMP, Spray Parcel No. 3, and the LSU to determine if coal ash may have been disposed along with mud in the FMP, Pond Sediment aging area on Parcel 3 and with the PCC in the LSU. SMBSC carried out this investigation in accordance with an MPCA approved work plan and found evidence that coal ash was present in the FMP, and no evidence in Parcel 3 or the LSU.

SW-282 PER 001 was issued in 2006 and required SMBSC to close the FMP using native soils. SMBSC closed the FMP and submitted a certification report for this closure and related cover in October 2007. The MPCA also required SMBSC to monitor wells near the FMP and the LSU including MW-6A. Monitoring results to date have indicated that the FMP cover is effective. The MPCA will continue to require SMBSC to monitor wells in the vicinity of the LSU, the coal pile and the FMP to verify the effectiveness of the FMP cover and the quality of the groundwater.

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1.1.43 Description: Background on Intervention Limits

1.1.44 The limits in the Limits Section are based upon site conditions, and the U.S. Environmental Protection Agency (EPA) Maximum Contaminant Level (MCL), Minnesota Department of Health (MDH) Health Risk Limits (HRL) Risk Assessment Advice (RAA) and Health Based Values (HBV). Intervention Limits (ILs) are routinely set at 25% of promulgated health-based standards. The MPCA may also incorporate other values, advisories, or other criteria based on protection of human health and the environment. The MDH currently has established a RAA of 1,000 ug/L for boron.

As per Minn. R. 7035.2815, subp. 4.H. site-specific ILs may be established based on background conditions that are not attributed to the regulated facility. The Permittee has submitted upgradient or ambient data to support a boron intervention limit of 0.31 mg/L. Also based on upgradient data the NO3-N IL is set at 28 mg/L. These alternative limits are incorporated into this permit.

1.1.45 Ground water flow in the vicinity of MW-6A may be influenced by a high capacity water intake supply well used by the sugar beet processing plant. MW-6A is used primarily to evaluate any remaining effects of coal pile runoff on the ground water.

The National Pollutant Discharge Elimination System/State Disposal System (NPDES/SDS) permit including stormwater runoff associated with the coal pile is scheduled to be issued in the near future. At such time that the NPDES permit is issued, the MPCA will transfer MW-6A to the NPDES permit to continue monitoring coal pile runoff.

1.1.46 Description: Groundwater Withdrawal and Flow Direction

1.1.47 The four SMBSC industrial water supply wells pump ground water all year round. As reported from Barr correspondence dated April 25, 2012, the minimum monthly total production from all wells since 2004 has been 3.9 million gallons, the maximum is 30.5 million gallons, with an average of 13.2 million gallons per month.

The high capacity pumpage from the industrial water supply wells greatly influences ground water flow around the facility, and ground water from the LSU and the western side of the soil processing unit (SPU) both flow towards the production wells.

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1.1.48 Manganese Intervention Limit

1.1.49 The MDH establishes groundwater performance standards that are incorporated into solid waste permits. During the previous permit cycle the MDH established a HBV for manganese (Mn) of 1,000 ug/L which was incorporated in the permit. Although subject to revision the current Health Risk Limit (HRL) for Mn is 100 ug/L. The current HRL of 100 ug/L is low, and many outwash aquifers in Minnesota exceed this limit

Elevated Mn may be due to naturally high Mn concentrations in the aquifer, from land use activities that disturbs the Mn geochemical equilibrium bringing it into solution, or from leaching from landfilled wastes.

Mn in the upgradient well MW-9 is currently below the detection limit of 50 ug/L, but limited data indicate that Mn is elevated in side-gradient wells MW-8 and MW-10.

Currently MW-30 and MW-31 (downgradient of the LSU) and MW-32 and MW-33 (downgradient of the FMP) have exceed the current 25 ug/L IL for Mn. MW-6A and MW-34 both have greatly exceeded the Mn limit.

MW-6A monitors primarily runoff from the coal storage area. MW-34 appears to be downgradient of "#5 Pond". #5 Pond is not regulated under permit SW-282, and may be addressed separately.

Modeling indicates that high capacity pumpage from the industrial wells should contain much if not most of the groundwater downgradient of the LSU and FMP. Unless new information or a more refined interpretation are presented no further actions beyond continued monitoring of Mn are suggested during this permit cycle for activities regulated under SW-282. This issue however will be re-evaluated during the next permit cycle.

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1.1.50 Nitrate-N Intervention Limit

1.1.51 The current NO₃-N intervention limit for monitoring wells associated with SW-282 is set at 28 mg/L. This limit was established using extensive NO₃-N data from site upgradient well MW-9, with the understanding that the high NO₃-N in MW-9 is not associated with any SMBSC site activities.

As per the Barr Memorandum dated April 24, 2012, the high NO₃-N present in MW-9 was attributed to land use activities located off site and upgradient of MW-9. The memo states "the only period when the area of MW9 may have been irrigated by SMBSC was sometime between the factory opening in the fall of 1975 and sometime before 1983."

1.2 Permit Documents

1.2.1 Permit Application

1.2.2 The permit application approved by this permit is signed and dated May 17, 2011, and incorporates the approved plans including Commissioner approved amendments as part of the plans and requirements of this permit.

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Permit Documents

1.2.3 Engineering Documents

- 1.2.4 The engineering documents approved by this permit include the following eleven items:
- Plan and Specification, Lime Storage Unit 1999 Cover Construction dated April 19, 1999.
 - May 2011 Engineering Report
 - January, 2011, Industrial By-Products Management Plan
 - May 2011 Industrial By-Products Management Plan
 - May 2011 Operation and Maintenance Manual;
 - March 2004 Contingency Action Plan dated (approved by November 17, 2007, permit modification);
 - March 2004 Closure/Post Closure Plan (approved by November 17, 2007, permit modification);
 - March 2004 Technical Specifications and Construction Quality Assurance/Quality Control Plan (approved by the November 17, 2007 permit modification);
 - May 2011 Permit Application Drawings dated May 18, 2011, including:
 - Engineering Drawings: Lime Storage Unit Existing Conditions Plan (drawing number C-01-P);
 - Engineering Drawings: Lime Storage Unit Permit Drawings, Phase 1 Layout (drawing number C-02-P);
 - Engineering Drawings: Lime Storage Unit Permit Drawings, Phase 2 Layout (drawing number C-03-P);
 - Engineering Drawings: Lime Storage Unit Permit Drawings, Surface Water Drainage (drawing number C-04-P);
 - Engineering Drawings: Lime Storage Unit Cross Sections dated (drawing number C-05-P);
 - Engineering Drawings: Lime Storage Unit Cross Sections (drawing number C-06-P); and
 - Engineering Drawings: Lime Storage Unit Permit Drawings Cross Sections and Details (drawing number C-07-P).

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Permit Documents

1.2.5 Hydrogeologic Evaluation Documents

- 1.2.6 The hydrogeologic evaluation documents submitted by the Permittee include the following items:
- Hydrogeologic Evaluation, SMBSC, Braun 1995;
 - Monitoring Well Installation Report, SMBSC, Braun 1996;
 - Groundwater Monitoring Well Impact Analysis Data, SMBSC, Braun 1997;
 - Environmental Monitoring System Proposal (EMSP) and Compliance Boundary Proposal (CBP) Lime Storage Unit Landfill, dated December 1998;
 - Monitoring Well Installation Report December 1998;
 - Sampling and Analysis Plan, February 2007;
 - The Corrective Action Evaluation Report April 1999;
 - 1998 Baseline Sampling Report, dated April 19, 1999;
 - Preliminary Report from Barr Engineering Company from Bill Bangsund, PG regarding the installation of monitoring well MW-6 dated October 18, 2005;
 - The 2005 Annual Facility Report regarding the installation of MW-6A.

1.2.7 Related Documents

- 1.2.8 SMBSC submitted the Permit Application and Supporting Information for Repermitting on March 1, 2004. The MPCA reissued Solid Wasted Permit SW-282 on November 17, 2006. These documents form the basis on which this permit reissuance application has been developed:
- December 1998 Environmental Monitoring System Proposal (EMSP) and Compliance Boundary Proposal (CBP)
 - December 1998 Sampling and Analysis Plan (SAP)
 - February 1999 Monitoring Well Installation Report
 - April 9, 1999, Modified Permit Application and Supporting Information for Repermitting
 - May 26, 2000, Construction Certification Information Letter
 - March 1, 2004, Permit Application and Supporting Document for SW-282 reissuance
 - March 1, 2004, Design Specifications and Quality Control and Quality Assurance Plan
 - June 27, 2007, LSU Final Cover and Construction Documentation and Certification Report
 - October 30, 2007, FMP Closure Certification Report
 - Annual Monitoring and Operations Reports from 1999 through 2010.
- Groundwater monitoring and an assessment of groundwater quality at the former mud pond (FMP) are included in the 2007 through 2011 annual reports.

These reports provide a detailed summary of the LSU and FMP site, site stratigraphy, site hydrology, monitoring system, and water quality monitoring results.

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Permit Documents

1.2.9 Applicability of Approved Plans

- 1.2.10 The Permittee shall comply with the approved plans and design, construct, and operate the facility in accordance with the terms and conditions of this permit and the approved plans. The approved plans are an integral and enforceable part of this permit. In the event that there is a conflict between the approved plans, Minnesota Rules and/or the terms and conditions of this permit, the most stringent and environmentally protective provisions shall apply unless otherwise approved in writing by the Commissioner. Any such approvals by the Commissioner shall become part of the approved plans for the facility. The Permittee shall keep a copy of the approved plans and all amendments and approvals to the approved plans at the Facility and make them available to the MPCA upon request.

1.3 Design and Construction Criteria

1.3.1 Location Standards

- 1.3.2 The Permittee may not locate, establish, or construct a solid waste management facility in areas designated in Minn. R. 7035.2555. The location of the facilities described in this permit satisfy the requirements of Minn. R. 7035.2555.

1.3.3 Storage Standards

- 1.3.4 A waste activity area where solid waste is stored must be designed in accordance with Minn. R. 7035.2855 except as provided in the following three items:
-For beneficial use or reuse in accordance with subp. 1;
-For industrial solid waste disposal facilities in accordance with Minn. R. 7035.2525, subp. 2. F.; or
-As is otherwise approved by the Commissioner in accordance with the terms and conditions of this permit.
- 1.3.5 Consistent with this permit and the application, the LSU has been approved for storage of PCC prior to PCC being used as an Ag-lime product.
- 1.3.6 The Permittee, within the Beet Sugar Processing Plant, may temporarily store PCC on storage areas with a hardened impervious base such as asphalt or concrete or compacted earthen surfaces if weather conditions are such that disposal or storage at the LSU is not possible. As soon as weather conditions allow, PCC shall be transported from these temporary storage areas to the LSU for storage, disposal or beneficial use.

1.3.7 Construction Plan

- 1.3.8 The Permittee must submit a construction plan to the Commissioner for approval prior to construction if the construction plan proposes any major revisions to the approved design.

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Design and Construction Criteria

1.3.9 Construction Notification

1.3.10 Unless the Commissioner orders otherwise, the Permittee shall notify appropriate MPCA staff at least ten (10) working days in advance of construction of the facility or any component thereof.

1.3.11 Construction Certification

1.3.12 The Permittee must submit a construction certification for approval by the Commissioner in accordance with Minn. R. 7035.2610. A facility waste activity or any new design feature must not be placed into operation until the construction certification has been approved by the Commissioner.

1.3.13 Alterations and Additions

1.3.14 The Permittee shall not make any major alterations or additions to the Facility that would materially alter the manner in which waste is managed without first obtaining written approval by the Commissioner.

1.4 Operating and Maintenance Criteria

1.4.1 Storage of Solid Waste

1.4.2 The Permittee shall be responsible for the satisfactory storage of all solid waste accumulated at the Facility in accordance with Minn. R. 7035.0700, Minn. R. 7035.2855 and the terms and conditions of this permit.

1.4.3 Collection and Transportation of Solid Waste

1.4.4 The Permittee shall provide for the proper collection and transportation of solid waste in accordance with Minn. R. 7035.0800.

1.4.5 Unacceptable Wastes

1.4.6 The Permittee must not accept specific wastes for treatment storage, processing, or disposal in accordance with Minn. R. 7035.2535, subp. 1 and the terms and conditions of this permit.

1.4.7 This permit only authorizes disposal of PCC and Tare 2 mud solids at the LSU consistent with the terms and conditions of this permit.

1.4.8 Security

1.4.9 The Permittee must prevent unauthorized entry onto the Facility in accordance with Minn. R. 7035.2535, subp. 3.

1.4.10 General Inspection

1.4.11 The Permittee must perform general inspections in accordance with Minn. R. 7035.2535, subp. 4.

1.4.12 Industrial Solid Waste Management Plan

1.4.13 The Permittee must manage industrial solid waste for each waste activity as specified in the approved plan in accordance with Minn. R. 7035.2535, subp. 5 and the terms and conditions of this permit. The terms and conditions of this permit satisfy Minn. R. 7035.2535, subp. 5.

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Operating and Maintenance Criteria

1.4.14 Household Hazardous Waste Management Plan

1.4.15 The Permittee is not authorized to dispose or store household hazardous waste at this Facility, under the terms and conditions of this permit.

1.4.16 Personnel Training

1.4.17 Facility personnel must successfully complete a program of classroom instruction or on-the-job training to maintain compliance with Minn. R. 7035.2525 through 7035.2915. Training to maintain compliance with Minn. R. 7035.2525 through 7035.2545 and Minn. R. 7035.2565 through 7035.2655 are required for this permit.

1.4.18 Operating Record

1.4.19 The Permittee must keep a written operating record at the Facility in accordance with Minn. R. 7035.2575. At a minimum, the operating record must include the following six items:

- A copy of the most recent Annual Facility Report;
- The description and amount, by volume or weight, of PCC and cover material in the disposal area;
- The inspection reports required by this permit, and copies of the inspection reports done by state or county officials;
- Summary reports of incidents that required implementing the LSU's contingency action plan;
- The monitoring and testing data required by this permit; and
- Personnel training records.

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1.5 Monitoring Criteria

1.5.1 Ground Water Performance Standards

1.5.2 The Permittee must design, construct, operate, and maintain the disposal area to achieve compliance with the performance standards set forth in the Limits Section of this permit. The limits in the Limits Section are based upon site conditions, and the U.S. Environmental Protection Agency (EPA) Maximum Contaminant Level (MCL), Minnesota Department of Health (MDH) Health Risk Limits (HRL) and Health Based Values (HBV). If an evaluation of the groundwater monitoring data demonstrates that the background water quality is higher than the intervention limit (Manganese and/or Nitrates are being considered at time of permit issuance) as contained in the Limits Section of this permit, then the Permittee, may submit the background ground water quality data evaluation and request that the Commissioner approve alternative intervention limits. The Commissioner may approve the use of such alternative intervention limits on a well by well basis and if approved by the Commissioner such approved intervention limits shall replace the existing intervention limits and become an enforceable part of this permit. Limits contained in the limits section of this permit or otherwise determined in accordance with this Part replace the standards listed in Minn. R. 7035.2815, subp. 4, item F, as provided for in Minn. R. 7035.2815, subp. 4, item H. This section in no way limits the Permittee from seeking adjustment to any existing intervention limits under Minn. R. 7035.2815 subp.4, Item H.

1.5.3 Compliance Boundary

1.5.4 The Permittee must establish compliance boundaries according to Minn. R. 7035.2815, subp. 4, items A through E. The compliance boundary in the approved documents listed in Part 1.2.6 of this permit satisfies this requirement.

1.5.5 Exceedence of Intervention Limit

1.5.6 If intervention limits are exceeded in a ground water sample from any location where the Facility's impacts are monitored, the Permittee must follow the requirements described in Minn. R. 7035.2815, subp. 4. G. and the terms and conditions of this permit.

1.5.7 Water Quality Sampling and Analysis (Sampling and Analysis Plan)

1.5.8 Water quality sampling and analysis must be conducted in accordance with Minn. R. 7035.2815, subp. 14 as reflected in the approved Sampling and Analysis Plan and must include the monitoring stations identified in the Limits Table(s) of this permit. Sampling must be conducted according to the schedule shown in the Limits Table(s) of this permit.

1.5.9 Background Water Quality Monitoring

1.5.10 The Permittee must determine the initial water quality in new monitoring points and monitoring systems, and perform background monitoring in accordance with Minn. R. 7035.2815, subp. 14, item E. The requirements of Minn. R. 7035.2815, subp. 14, item E have been satisfied by the ground water evaluation conducted to the date of issuance of this permit and by the terms and conditions of this permit.

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TOTAL FACILITY

Monitoring Criteria

1.5.11 Monitoring Protocol

- 1.5.12 The Permittee shall conduct all field and laboratory monitoring at the facility in accordance with the most recently Commissioner approved Sampling and Analysis Plan. The Permittee shall submit to the Commissioner for review, and obtain approval from the Commissioner prior to implementation, any proposed changes to the Sampling and Analysis Plan including any changes to the monitoring systems, field or analytical procedures and contract laboratory.
- 1.5.13 The Permittee must develop and keep current a written monitoring protocol for the disposal area according to Minn. R. 7035.2815, subp. 14, item G and must ensure the protocol is followed during sampling and sample analysis.

1.5.14 Groundwater Quality Sampling and Analysis

- 1.5.15 Ground water quality sampling and analysis must be conducted in accordance with Minn. R. 7035.2815, subp. 14 and must include the monitoring stations identified in the Limits Table(s) of this permit. Sampling must be conducted according to the schedule shown in the Limits Table(s) of this permit. For parameters that must be sampled in the fall, sampling may begin October 1 instead as otherwise indicated as October 21 at some locations in this permit.

1.5.16 Leachate Quality Sampling and Analysis

- 1.5.17 A leachate monitoring, collection system and/or treatment system is not required by this permit at the time of issuance. If required by the Commissioner, the Permittee shall design, construct and operate a leachate monitoring system meeting the requirements of Minn. R. 7035.2815, subp. 14.

1.5.18 Gas Monitoring

- 1.5.19 A gas monitoring, collection system and/or treatment system is not required by this permit at the time of issuance. If required by the Commissioner, the Permittee shall design, construct and operate a gas monitoring system to meet the requirements of Minn. R. 7035.1700, subp. U.

1.5.20 Modifications to the Water Monitoring System

- 1.5.21 The Commissioner reserves the right to require additional ground water and surface water monitoring locations, analytic parameters and more frequent sampling and analysis consistent with applicable Minnesota Statutes and Rules. Upon request of the Commissioner the Permittee shall propose additional monitoring points subject to final review and approval by the Commissioner.

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Monitoring Criteria

1.5.22 Design, Installation, and Abandonment of Wells

1.5.23 All monitoring locations must be designed, installed, maintained and abandoned in accordance with Minn. R. 7035.2815, subp. 10. The Permittee shall submit a proposal for installation of new monitoring locations or abandonment of existing monitoring locations at least thirty (30) days prior to planned implementation. The proposal shall include a description of the installation or abandonment procedures. Within thirty (30) days after installing or sealing a monitoring location, the Permittee shall submit to the Commissioner of the MPCA and MDH a record of the monitoring location construction or sealing in accordance with Minn. R. 7035.2815, subp. 10, items P and Q.

1.5.24 Precipitated Calcium Carbonate

1.5.25 The results from testing the precipitated calcium carbonate (PCC) for agricultural liming purposes must be submitted to the MPCA in the annual report.

1.6 Reporting Criteria

1.6.1 Annual Facility Report

1.6.2 As part of the Annual Facility Report the Permittee shall discuss, interpret and evaluate trends in the groundwater monitoring data. In evaluating trends in the data, the Permittee shall consider the hydrogeologic flow of groundwater and any sources which might be affecting trends in groundwater quality including but not limited to the following:

- Background water quality data;
- Surficial sources of runoff and seepage from areas such as a nearby coal pile, the Former Mud Pond, facility drainage ditches, and other waste;
- Draw-down from high capacity water supply wells; and
- All other land application or disposal practices at the Facility.

1.6.3 Electronic Data Reporting

1.6.4 The Permittee shall submit an electronic copy of all water quality monitoring data for each monitoring event. Electronic data must be submitted in the format outlined in the MPCA Solid Waste Program Electronic Laboratory Data Submittal Manual which can be found on the MPCA Solid Waste Permitting webpage at <http://www.pca.state.mn.us/waste/swpermits.html#data>. The schedule for submitting electronic copies of monitoring data shall follow the schedule outlined for monitoring reports as identified in the Required Actions and Submittals Table(s) of this permit.

1.6.5 Unless specifically directed by the Commissioner, the submittal of a paper copy of all water monitoring reports as outlined in the Required Actions and Submittals Table(s) is still required.

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Reporting Criteria

1.6.6 Monitoring Station Location Information

- 1.6.7 Location and elevation data shall be collected for all monitoring stations. Prior to collecting this information, a work plan shall be submitted for Commissioner approval, that outlines the proposed methods to be used. Location data must be submitted in latitude/longitude coordinates and the datum used must be identified. Elevation data for monitoring wells must include the elevation of the riser pipe, ground surface and the depth of the well from the top of the riser pipe. If existing data is being reported, the surveying method and datum used to collect the information must be identified. The foregoing data for all monitoring stations existing at the time of issuance of this permit has been submitted and is approved as part of this permit.

1.7 Contingency Action Criteria

1.7.1 Contingency Action Plan

- 1.7.2 The Permittee shall address all facility waste activities in the approved contingency action plan in accordance with Minn. R. 7035.2615. At the time of issuance of this permit, the March 1, 2004 (this is the same plan as in present application for reissuance), Contingency Action Plan submitted by the Permittee meets the requirement for an approved plan and is consistent with the terms and conditions of this permit.
- 1.7.3 The Commissioner may require at any time that the contingency action plan be modified to account for unforeseen events, new information, or work beyond that identified in the current contingency action plan.

1.7.4 Emergency Preparedness and Prevention

- 1.7.5 The Permittee must design, construct, maintain, and operate a facility to minimize the possibility of a fire, explosion, or any release to air, land, or water of pollutants that threaten human health and the environment in accordance with Minn. R. 7035.2595.

1.7.6 Emergency Procedures

- 1.7.7 The Permittee must take all reasonable containment measures during an emergency and submit a written report to the Commissioner in accordance with Minn. R. 7035.2605.

1.8 Closure Criteria

1.8.1 Closure Plan

- 1.8.2 The Permittee must close the Facility and each waste activity as specified in the approved plan in accordance with Minn. R. 7035.2625. At the time of issuance of this permit, the March 2004, Closure Plan submitted by the Permittee meets this requirement for an approved closure plan and is consistent with the terms and conditions of this permit.

1.8.3 Closure Procedures

- 1.8.4 The Permittee must perform closure in accordance with Minn. R. 7035.2635.

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TOTAL FACILITY

Closure Criteria

1.8.5 Abandonment

1.8.6 The disposal area must be closed and abandoned in accordance with this permit and Minn. R. 7035.2500.

1.8.7 Ultimate Land Use

1.8.8 The portions of the Facility filled with waste shall be left as open space with no storage or construction occurring on the site unless approved by the Commissioner.

1.9 Postclosure Criteria

1.9.1 Postclosure Plan

1.9.2 The Permittee must comply with postclosure requirements in the approved plan in accordance with Minn. R. 7035.2645. At the time of issuance of this permit, the March 2004, Postclosure Plan submitted by the Permittee meets the requirement for an approved postclosure plan and is consistent with the terms and conditions of this permit.

1.9.3 Postclosure Care

1.9.4 The Permittee must perform postclosure care in accordance with Minn. R. 7035.2655, subp. 1, as indicated in the approved postclosure care plan.

1.9.5 Postclosure Use of Property

1.9.6 The Permittee must comply with postclosure use of property requirements in accordance with Minn. R. 7035.2655, subp. 2. Implementation of the elements contained in the March 2004, approved Postclosure Plan meets this requirement.

1.10 Financial Criteria

1.10.1 Cost Estimates

1.10.2 The Permittee is not required to maintain financial assurance for closure, postclosure, or contingency action for the facilities permitted herein. The Commissioner may direct the Permittee to keep the current cost estimates for each waste activity at the Facility during the operating life in accordance with Minn. R. 7035.2685, subp. 2.

1.11 General Conditions

1.11.1 Release

1.11.2 This permit is valid until the expiration date unless revoked or modified by the MPCA pursuant to Minn. R. 7001.0170 through 7001.0190. To allow for adequate MPCA review time and to avoid possible termination of the permit at the time the permit expires, an application for reissuance of the permit must be submitted to the Commissioner no later than 180 calendar days before the expiration date of the permit.

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General Conditions

1.11.3 The MPCA's issuance of a permit does not release the Permittee from any liability, penalty, or duty imposed by Minnesota or federal statutes, or regulations, or local ordinances including, but not limited to, those promulgated pursuant to Minn. Stat. chs. 115, 115A, 116, 400 and 473. This permit shall be permissive only and shall not be construed as estopping or limiting any claims against the Permittee, its agents, contractors, or assigns, nor as estopping or limiting any legal claims of the state against the permittee, its agents, contractors, or assigns for damages to state property, or for any violation of the terms of this permit.

1.11.4 Future Changes

1.11.5 The MPCA's issuance of a permit does not prevent the future adoption by the MPCA of pollution control rules, standards, or enforcement orders more stringent than those now in existence and does not prevent the enforcement of these rules, standards, or enforcement orders against the Permittee.

1.11.6 Rights and Privilege

1.11.7 The permit does not convey a property right or an exclusive privilege.

1.11.8 Enforcement

1.11.9 The MPCA's issuance of a permit does not obligate the MPCA to enforce local laws, rules or plans beyond that authorized by Minnesota Statutes.

1.11.10 Performance

1.11.11 The Permittee shall perform the actions or conduct the activity authorized by the permit in accordance with the submittals and specifications approved by the MPCA and in compliance with the conditions of the permit.

1.11.12 Operation and Maintenance

1.11.13 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.

1.11.14 Groundwater Quality, Surface Water Quality, Air Quality and Soil Protection

1.11.15 The Permittee must locate, design, construct, operate and maintain the Facility to prevent pollution of ground water and surface water, minimize the contamination of soils from solid waste, and maintain the Facility in conformance with MPCA air pollution control rules in accordance with Minn. R. 7035.2565.

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TOTAL FACILITY

General Conditions

1.11.16 Storm Water Management System

1.11.17 The Permittee shall construct, certify, operate and maintain the storm water management system for the Facility with Best Management Practices to manage storm water discharges in accordance with the NPDES/SDS Permit MN 0040665.

1.11.18 Honesty

1.11.19 The Permittee may not knowingly make a false or misleading statement, representation, or certification in a record, report, plan, or other document required to be submitted to the MPCA or the Commissioner by the permit. The Permittee shall immediately upon discovery report to the Commissioner an error or omission in these records, reports, submittals or other documents.

1.11.20 Timely Information Submittal

1.11.21 The Permittee shall, when requested by the Commissioner, 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.

1.11.22 Access

1.11.23 When authorized by Minn. Stat. 115.04, 115B.17, subd. 4 and 116.091, and upon presentation of proper credentials, the MPCA, or an authorized employee or agent of the MPCA, 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.

1.11.24 Discovery of Noncompliance

1.11.25 If the Permittee discovers, through any means, including notification by the MPCA, that noncompliance with a condition of the permit has occurred, the Permittee shall take all reasonable steps to minimize the adverse impacts on human health, public drinking water supplies, or the environment resulting from the noncompliance.

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TOTAL FACILITY

General Conditions

1.11.26 Notification of Noncompliance

1.11.27 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. Within five (5) days of the discovery of the noncompliance, the Permittee shall submit to the Commissioner a written description of the noncompliance; the cause of the noncompliance; the exact dates of the period of the noncompliance; if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

1.11.28 Reporting of Noncompliance

1.11.29 The Permittee shall report noncompliance with the permit not otherwise required to be reported or reported in Part 1.11.26 by submitting the information listed in Notification of Noncompliance within 30 days of the discovery of the noncompliance.

1.11.30 Alterations

1.11.31 The Permittee shall give advance notice to the Commissioner as soon as possible of planned physical alterations or additions to the permitted Facility or activity that may result in noncompliance with a Minnesota or federal pollution control statute or rule or condition of the permit.

1.11.32 Permit Transfer

1.11.33 The Permittee must notify the MPCA before transferring ownership or operation of this solid waste management facility during its operating life or during postclosure care period in accordance with Minn. R. 7035.2535, subp. 2. This permit is not transferable to any person without the express written approval of the MPCA after compliance with the requirements of Minn. R. 7001.0190. A person to whom the permit has been transferred shall comply with the terms and conditions of this permit.

1.11.34 Responsibility for Damage

1.11.35 The permit authorizes the Permittee to perform the activities described in the permit under the conditions of the permit. In issuing the permit, the state and 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 the permit. To the extent the state and MPCA may be liable for the activities of its employees, that liability is explicitly limited to that provided in the Tort Claims Act, Minn. Stat. 3.736.

1.11.36 Modifying or Revoking Permit

1.11.37 The Commissioner may commence proceedings to modify or revoke this permit during its terms if cause exists under Minn. R. 7001.0170 through 7001.0180.

1.11.38 Severability

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TOTAL FACILITY

General Conditions

1.11.39 The provisions of this permit are severable. If any provision of this permit is held invalid, the remainder of this permit shall not be affected.

1.11.40 Extensions

1.11.41 The Permittee may request an extension of the dates set forth in this permit including the submittal and monitoring dates. The request must include justification for requesting the extension of the date. Based on the justification, the Commissioner may grant an extension.

1.11.42 Term of Permit

1.11.43 This permit is valid until the expiration date unless revoked or modified by the MPCA pursuant to Minn. R. 7001.0170 to 7001.0180. To allow for adequate MPCA review time and to avoid possible termination of the permit at the time the permit expires, an application for reissuance of the permit must be submitted to the Commissioner no later than 180 calendar days before the expiration date of the permit.

1.11.44 Retention of Records

1.11.45 The Permittee must maintain records of all ground water monitoring data and ground water surface elevations for the active life of the Facility and each waste activity and, for disposal activities, for the postclosure care period. The Permittee must submit the data electronically, and also maintain an operating record in accordance with Minn. R. 7035.2575 until closure of each waste activity at the Facility.

1.11.46 As-built Plans

1.11.47 The Permittee may not start treatment, storage, or disposal of solid waste in a new solid waste management facility or in a modified portion of an existing solid waste management facility until the Commissioner has received a letter and as-built plans signed by the owner or operator and by an engineer registered in Minnesota certifying that the Facility or modified portion of the Facility has been constructed in compliance with the conditions of the permit.

1.11.48 Construction Certification

1.11.49 The Permittee may not start treatment, storage, or disposal of solid waste in a new solid waste management facility or in a modified portion of an existing solid waste management facility until the Commissioner has inspected the new facility or modified portion of the facility and has provided the owner or operator with written correspondence (E-mail or letter) stating that the certification submitted is complete and approved.

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TOTAL FACILITY

General Conditions

1.11.50 Financial Assurance

- 1.11.51 The Permittee is not required to maintain financial assurance for closure, postclosure, and contingency action at the LSU. The Commissioner reserves the right to require financial assurance in accordance with Minn. R. 7035.2695.
- 1.11.52 Consistent with applicable rules and laws and the terms and conditions of this permit, the Permittee may not start treatment, storage, or disposal of solid waste in a new solid waste management facility or in a modified portion of an existing solid waste management facility that would need financial assurance until the Commissioner has approved the financial assurance amount and instrument to be used for the Facility in accordance with Minn. R. 7035.2665 through 7035.2805.

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2. INDUSTRIAL WASTE DISPOSAL AREA IL 001

2.1 Design and Construction Criteria

2.1.1 Prohibited Areas

2.1.2 The disposal of industrial solid waste is prohibited within the areas outlined in Minn. R. 7035.1600. The design in the approved plans and the terms and conditions of this permit, meets these requirements.

2.1.3 Permit Application and Required Plans

2.1.4 Plans, including a permit application, report, and drawings must be prepared by a registered engineer of Minnesota. The submitted plans must include those outlined in Minn. R. 7035.1800. At the time of issuance of this permit, the design in the approved plans and the terms and conditions of this permit meet this requirement.

2.1.5 Location of Disposal Area

2.1.6 The disposal area must be located in accordance with Minn. R. 7035.2555 and Minn. R. 7035.2815, subp. 2. At the time of issuance of this permit, the location in the approved plans and the terms and conditions of this permit meet this requirement.

2.1.7 Construction

2.1.8 At a minimum, all major design features must incorporate the construction requirements of Minn. R. 7035.2815, subp. 12. into the project specifications. At the time of issuance of this permit, the approved plans and the terms and conditions of this permit meet this requirement.

2.1.9 Design

2.1.10 The disposal area must be designed in accordance with Minn. R. 7035.2815, subp. 5. At the time of issuance of this permit, the design in the approved plans and the terms and conditions of this permit meet this requirement.

2.1.11 Intermittent, Intermediate, and Final Cover System

2.1.12 The Permittee must design a cover system in accordance with Minn. R. 7035.1700, subp. D and Y. At the time of issuance of this permit, the design in the approved plans and the terms and conditions of this permit meet this requirement.

2.1.13 Intermittent Cover

2.1.14 Intermittent Cover: Application of daily cover over PCC and/or Tare 2 wastes is not required during the beet processing campaign, unless otherwise required by the Commissioner. An exception to this is that application of 6 inches of Commissioner approved compacted suitable intermittent cover material shall be required by July 1 of each year, if less than 120 days will pass before the specific area in the LSU will be used for disposal. Intermittent cover is not required on disposal areas where PCC is being stored for beneficial use as agricultural lime. In accordance with the terms and conditions of this permit, the Commissioner approves mud solids (Tare 2) as suitable cover material for this Facility.

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INDUSTRIAL WASTE DISPOSAL AREA IL 001

Design and Construction Criteria

2.1.15 Intermediate Cover

2.1.16 Intermediate Cover: Intermediate cover shall be placed on all interior and exterior slopes as the cell is being developed. An intermediate cover totaling at least 12 inches of compacted, suitable, cover material must be provided and maintained on PCC fill areas that will have no additional waste disposal for 120 days or longer. Intermediate cover must also be provided and maintained on spent lime fill areas with intermittent cover that has not had or will not have additional PCC or final cover placed for 120 days or longer. Areas that have not received additional waste or final cover for more than 180 days shall be seeded and/or mulched to prevent excessive erosion. Intermediate cover is not required on disposal areas where PCC is being stored for beneficial use as agricultural lime.

2.1.17 Final Cover

- 2.1.18 Final cover must be applied according to the Commissioner approved closure procedures, the construction quality assurance control plan and the approved engineering plans. At the time of issuance of this permit, the design in the approved plans and the terms and conditions of this permit meet this requirement.
- 2.1.19 Final cover, shall be a minimum of 2 feet thick, placed, graded, and compacted to the quality assurance/quality control specifications over fill areas that have reached their highest permitted elevations as described in the approved engineering plans.
- 2.1.20 The lower 12 inches of final cover shall be placed and compacted to a minimum 90% standard proctor density. The lower 6 inches of the upper 12 inches of final cover shall be rooting zone material and the upper 6 inches shall be topsoil placed, seeded and mulched. Vegetation must be adequately maintained on final cover. All final cover slope grades shall be between 2 percent and 20 percent.

2.1.21 Liner Design

2.1.22 Except as otherwise required by this permit, liner design must comply with the requirements of Minn. R. 7035.2815, subp. 7. At the time of issuance of this permit, the design in the approved plans and the terms and conditions of this permit meet this requirement.

2.1.23 Cover and Liner Materials Evaluation

- 2.1.24 Soils intended for use as cover or liner material must be evaluated in accordance with Minn. R. 7035.2815, subp. 8.
- 2.1.25 Throughout construction of the final cover system, the Permittee shall follow the approved construction quality assurance control plan and testing procedures described in the documents described in the Documents section of this permit. The Permittee shall conduct tests in accordance with the verification procedures outlined in the approved plans and this permit, and shall submit the test results to the Commissioner for review and approval as part of the construction certification described in this permit.

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INDUSTRIAL WASTE DISPOSAL AREA IL 001

Design and Construction Criteria

2.1.26 Leachate Detection, Collection, and Treatment System

- 2.1.27 Typically disposal areas at industrial solid waste facilities must include a leachate detection, collection, and on-site or off-site treatment system in accordance with Minn. R. 7035.2815, subp. 9. At the time of issuance of this permit, the disposal area identified and the materials approved to be placed do not necessitate a leachate collection system.

2.2 Operating and Maintenance Criteria

2.2.1 Maintenance and Operation

- 2.2.2 The Permittee must maintain and operate the disposal area in conformance with the practices outlined in Minn. R. 7035.1590 through Minn. R. 7035.2500 unless otherwise allowed by this permit.

2.2.3 Basic Permit, Certification, and Compliance

- 2.2.4 The disposal area must not be opened or placed into operation until the basic permit, certification, and compliance requirements of Minn. R. 7035.1900 have been satisfied.

2.2.5 Certified Operator

- 2.2.6 The disposal area must be operated by a certified operator, as defined in Minn. R. 7048.0100 through 7048.1300, and in accordance with Minn. R. 7035.1700 item P. The Permittee is only authorized to accept waste generated in the sugar beet processing facility and never from a third party. Consequently the certified operator is not required to be present at the time of placement of solid waste authorized for disposal by this permit. Prior to placement of cover, the certified operator must examine and verify that solid waste disposal is consistent with the terms and conditions of this permit. All operations must conform to state and federal site safety regulations.

2.2.7 Intermittent, Intermediate, and Final Cover System

- 2.2.8 The Permittee must maintain a cover system in accordance with Minn. R. 7035.1700, subp. D and Y. See the Intermittent, intermediate and final cover requirements indicated in Design and Construction Criteria of this permit.

2.2.9 Restricted Fill Areas

- 2.2.10 At the start of each campaign the Permittee shall designate the area to be used for disposal or storage of PCC during each beet processing campaign. The designated area shall not exceed fifteen (15) acres in size and shall have intermittent cover or intermediate cover in place at the start of the campaign in accordance with the requirements of this permit for placement of intermittent and intermediate cover as described in Design and Construction Criteria of this permit.

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INDUSTRIAL WASTE DISPOSAL AREA IL 001

Operating and Maintenance Criteria

2.2.11 Storm Water Management System

2.2.12 The Permittee shall operate and maintain the storm water management system for the disposal area with Best Management Practices to manage storm water discharges in accordance with the NPDES/SDS Permit MN 0040665.

2.2.13 The Permittee must maintain a run-on control system to prevent flow onto the waste activity area and a run-off control system to collect and control flow from the waste activity area resulting from a 24-hour, 25-year storm.

2.2.14 Minimum Separation to Groundwater

2.2.15 The Permittee shall maintain a minimum 5 foot separation between the disposal of new waste and the seasonal high ground water table at all times.

2.3 Reporting Criteria

2.3.1 Routine Monitoring Reporting

2.3.2 The Permittee shall submit routine water monitoring results accompanied by information sufficient to establish the reliability, precision, and accuracy of the reported values, including the requirements of Minn. R. 7035.2815, subp. 14, item P. The Permittee shall submit the monitoring results to the Commissioner according to the schedule in the Required Actions and Submittals Table(s) of this permit.

2.3.3 Annual Monitoring Evaluation

2.3.4 Annual Waste Activity Report

2.3.5 The Permittee shall submit an annual waste activity report in accordance with Minn. R. 7035.2585 and 7035.2815, subp. 13, item S. The Permittee shall submit the report to the Commissioner, as part of the Annual Facility Report, according to the schedule in the Required Actions and Submittals Table(s) of this permit.

2.3.6 As part of the Annual Facility Report, the Permittee shall include a summary of solids management practices. This summary shall be included in a separate section of the annual report titled "Management of Other Solids." At a minimum, the summary shall include solids management for fieldstone, sand, lime spalls, pallets and concrete materials. The summary shall also discuss any management practices that will be needed for the up-coming year.

LIMITS TABLE

Comments:

Report Date: 06/20/2012

Facility: SMBSC Lime Storage Unit - LSU

Permit SW-282

Standard Landfill Monitoring Periods:

Spring: Mar-14 to Apr-21

Summer: Jun-21 to Jul-31

Fall: Oct-21 to Nov-21

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This Limits Table applies to the following stations:

MW-1 , MW-10 , MW-11 , MW-12 , MW-13 , MW-15 , MW-19 , MW-2 , MW-20 , MW-21 , MW-22 , MW-23 , MW-24 , MW-25 , MW-26A , MW-28 , MW-29 , MW-3 , MW-7 , MW-8 , PZ-1 , PZ-2 , PZ-3

Analyte	CAS/EMMI#	Intervention Limit	Units	Frequency	Comments
Static Water Level (Elevation, MSL)	PCA-00-1	-	ft	Spring and Fall	

Permit Issued:

Permit Expires:

LIMITS TABLE

Comments:

Report Date: 06/20/2012

Facility: SMBSC Lime Storage Unit - LSU

Permit SW-282

Standard Landfill Monitoring Periods:

Spring: Mar-14 to Apr-21

Summer: Jun-21 to Jul-31

Fall: Oct-21 to Nov-21

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This Limits Table applies to the following stations:

MW-30 , MW-31 , MW-33 , MW-34 , MW-5 , MW-6A

Analyte	CAS/EMMI#	Intervention Limit	Units	Frequency	Comments
Ammonia Nitrogen	766-44-17	-	ug/L	Fall	
Arsenic	744-03-82	2.5	ug/L	Fall	
Barium	744-03-93	500.0	ug/L	Fall	
Boron	744-04-28	0.31	ug/L	Fall	
Calcium	744-07-02	-	ug/L	Fall	
Chloride	168-87-006	-	ug/L	Fall	Results should be compared to 250,000 ug/l.
Copper	744-05-08	250.0	ug/L	Fall	
Dissolved Oxygen, Field	T-1-05	-	mg/L	Fall	
Dissolved Solids, Total	C-0-10	-	mg/L	Fall	
Eh (Oxidation potential)	4	-	mV	Fall	
Iron	743-98-96	-	ug/L	Fall	
Lead	743-99-21	1.25	ug/L	Fall	
Magnesium	743-99-54	-	ug/L	Fall	
Manganese	743-99-65	25.0	ug/L	Fall	
Mercury	743-99-76	0.5	ug/L	Fall	
Molybdenum	743-99-87	7.5	ug/L	Fall	
Nitrate + Nitrite	C-0-05	28,000.0	ug/L	Fall	Indexed to MW-9
Nitrogen, Kjeldahl, Total	C-0-21	-	ug/L	Fall	
pH	C-0-06	-	SU	Fall	
Phosphorus	772-31-40	-	ug/L	Fall	
Selenium	778-24-92	7.5	ug/L	Fall	
Sodium	744-02-35	-	ug/L	Fall	
Specific Conductance	C-0-11	-	umho/cm	Fall	
Static Water Level (Elevation, MSL)	PCA-00-1	-	ft	Spring and Fall	
Sulfate	148-08-798	-	ug/L	Fall	
Temperature	T-1-21	-	Deg C	Fall	
Turbidity, Field	G-0-19	-	NTU	Fall	
Zinc	744-06-66	500.0	ug/L	Fall	

Permit Issued:

Permit Expires:

LIMITS TABLE

Comments:

Report Date: 06/20/2012

Facility: SMBSC Lime Storage Unit - LSU

Permit SW-282

Standard Landfill Monitoring Periods:

Spring: Mar-14 to Apr-21

Summer: Jun-21 to Jul-31

Fall: Oct-21 to Nov-21

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This Limits Table applies to the following stations:

MW-32

Analyte	CAS/EMMI#	Intervention Limit	Units	Frequency	Comments
Ammonia Nitrogen	766-44-17	-	ug/L	Fall	
Arsenic	744-03-82	2.5	ug/L	Fall	
Barium	744-03-93	500.0	ug/L	Fall	
Boron	744-04-28	0.32	ug/L	Fall	
Calcium	744-07-02	-	ug/L	Fall	
Chloride	168-87-006	-	ug/L	Fall	Results should be compared to 250,000 ug/l.
Copper	744-05-08	250.0	ug/L	Fall	
Dissolved Oxygen, Field	T-1-05	-	mg/L	Fall	
Dissolved Solids, Total	C-0-10	-	mg/L	Fall	
Eh (Oxidation potential)	4	-	mV	Fall	
Iron	743-98-96	-	ug/L	Fall	
Lead	743-99-21	1.25	ug/L	Fall	
Magnesium	743-99-54	-	ug/L	Fall	
Manganese	743-99-65	25.0	ug/L	Fall	
Mercury	743-99-76	0.5	ug/L	Fall	
Molybdenum	743-99-87	7.5	ug/L	Fall	
Nitrate + Nitrite	C-0-05	28,000.0	ug/L	Fall	Indexed to MW-9
Nitrogen, Kjeldahl, Total	C-0-21	-	ug/L	Fall	
pH	C-0-06	-	SU	Fall	
Phosphorus	772-31-40	-	ug/L	Fall	
Selenium	778-24-92	7.5	ug/L	Fall	
Sodium	744-02-35	-	ug/L	Fall	
Specific Conductance	C-0-11	-	umho/cm	Fall	
Static Water Level (Elevation, MSL)	PCA-00-1	-	ft	Spring and Fall	
Sulfate	148-08-798	-	ug/L	Fall	
Temperature	T-1-21	-	Deg C	Fall	
Turbidity, Field	G-0-19	-	NTU	Fall	
Zinc	744-06-66	500.0	ug/L	Fall	

Permit Issued:

Permit Expires:

LIMITS TABLE

Comments:

Report Date: 06/20/2012

Facility: SMBSC Lime Storage Unit - LSU

Permit SW-282

Standard Landfill Monitoring Periods:

Spring: Mar-14 to Apr-21

Summer: Jun-21 to Jul-31

Fall: Oct-21 to Nov-21

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This Limits Table applies to the following stations:

MW-9

Analyte	CAS/EMMI#	Intervention Limit	Units	Frequency	Comments
Ammonia Nitrogen	766-44-17	-	ug/L	Fall	
Arsenic	744-03-82	2.5	ug/L	Fall	
Barium	744-03-93	500.0	ug/L	Fall	
Boron	744-04-28	0.31	ug/L	Fall	
Calcium	744-07-02	-	ug/L	Fall	
Chloride	168-87-006	-	ug/L	Fall	Results should be compared to 250,000 ug/l.
Copper	744-05-08	250.0	ug/L	Fall	
Dissolved Oxygen, Field	T-1-05	-	mg/L	Fall	
Dissolved Solids, Total	C-0-10	-	mg/L	Fall	
Eh (Oxidation potential)	4	-	mV	Fall	
Iron	743-98-96	-	ug/L	Fall	
Lead	743-99-21	1.25	ug/L	Fall	
Magnesium	743-99-54	-	ug/L	Fall	
Manganese	743-99-65	25.0	ug/L	Fall	
Mercury	743-99-76	0.5	ug/L	Fall	
Molybdenum	743-99-87	7.5	ug/L	Fall	
Nitrate + Nitrite	C-0-05	28,000.0	ug/L	Fall	
Nitrogen, Kjeldahl, Total	C-0-21	-	ug/L	Fall	
pH	C-0-06	-	SU	Fall	
Phosphorus	772-31-40	-	ug/L	Fall	
Selenium	778-24-92	7.5	ug/L	Fall	
Sodium	744-02-35	-	ug/L	Fall	
Specific Conductance	C-0-11	-	umho/cm	Fall	
Static Water Level (Elevation, MSL)	PCA-00-1	-	ft	Spring and Fall	
Sulfate	148-08-798	-	ug/L	Fall	
Temperature	T-1-21	-	Deg C	Fall	
Turbidity, Field	G-0-19	-	NTU	Fall	
Zinc	744-06-66	500.0	ug/L	Fall	

Permit Issued:

Permit Expires:

LIMITS TABLE

Comments:

Report Date: 06/20/2012

Facility: SMBSC Lime Storage Unit - LSU

Permit SW-282

Standard Landfill Monitoring Periods:

Spring: Mar-14 to Apr-21

Summer: Jun-21 to Jul-31

Fall: Oct-21 to Nov-21

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This Limits Table applies to the following stations:

TPW-4

Analyte	CAS/EMMI#	Intervention Limit	Units	Frequency	Comments
Ammonia Nitrogen	766-44-17	-	ug/L	Fall	
Arsenic	744-03-82	2.5	ug/L	Fall	
Barium	744-03-93	500.0	ug/L	Fall	
Boron	744-04-28	0.31	ug/L	Fall	
Calcium	744-07-02	-	ug/L	Fall	
Chloride	168-87-006	-	ug/L	Fall	Results should be compared to 250,000 ug/l.
Copper	744-05-08	250.0	ug/L	Fall	
Dissolved Oxygen, Field	T-1-05	-	mg/L	Fall	
Dissolved Solids, Total	C-0-10	-	mg/L	Fall	
Eh (Oxidation potential)	4	-	mV	Fall	
Iron	743-98-96	-	ug/L	Fall	
Lead	743-99-21	1.25	ug/L	Fall	
Magnesium	743-99-54	-	ug/L	Fall	
Manganese	743-99-65	25.0	ug/L	Fall	
Mercury	743-99-76	0.5	ug/L	Fall	
Molybdenum	743-99-87	7.5	ug/L	Fall	
Nitrate + Nitrite	C-0-05	28,000.0	ug/L	Fall	Indexed to MW-9
Nitrogen, Kjeldahl, Total	C-0-21	-	ug/L	Fall	LSU Monitoring
pH	C-0-06	-	SU	Fall	
Phosphorus	772-31-40	-	ug/L	Fall	
Selenium	778-24-92	7.5	ug/L	Fall	
Sodium	744-02-35	-	ug/L	Fall	
Specific Conductance	C-0-11	-	umho/cm	Fall	
Static Water Level (Elevation, MSL)	PCA-00-1	-	ft	Spring and Fall	
Sulfate	148-08-798	-	ug/L	Fall	
Temperature	T-1-21	-	Deg C	Fall	
Turbidity, Field	G-0-19	-	NTU	Fall	
Zinc	744-06-66	500.0	ug/L	Fall	

Permit Issued:

Permit Expires:

Required Actions and Submittals Table

Report Date: 06/20/2012

Facility: SMBSC Lime Storage Unit - LSU

Permit SW-282

Action: PER002

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Subject Item I.D. Total Facility

Required Actions/Submittals

Frequency/Due Date	Action or Submittal	Requirement
TBD	Submit Permit Application	This permit is valid until the expiration date unless revoked or modified by the MPCA pursuant to Minn. R. 7001.0170 through 7001.0190. To allow for adequate MPCA review time and to avoid possible termination of the permit at the time the permit expires, an application for reissuance of the permit must be submitted to the Commissioner no later than 180 calendar days before the expiration date of the permit.

Subject Item I.D. IL001

Required Actions/Submittals

Frequency/Due Date	Action or Submittal	Requirement
Annually	Submit Annual Waste Activity Report	An annual activity waste report for the industrial waste disposal area must be submitted by February 1 with the Annual Facility Report. The report must include the specific items identified in Minn. R. 7035.2585 and 7035.2815, subp. 13, item S.
Annually	Submit Autumn Water Monitoring Report	The fall sampling event may be undertaken in coordination with the NPDES sampling event but no earlier than October 1, and no later than November 21. An autumn water monitoring report must be submitted by January 31 of each year. The water monitoring results must be accompanied by information sufficient to establish the reliability, precision, and accuracy of the reported values, including the requirements of Minn. R. 7035.2815, subp. 14, item P.
Annually	Submit Annual Water Monitoring Evaluation Report	The Permittee, must submit an annual water monitoring evaluation report by February 1 of each year in accordance with Minn. R. 7035.2585 and 7035.2815, subp. 14, item Q. The report shall be submitted with the Annual Facility Report and must include a summary and discussion of the monitoring results for the preceding calendar year.

Waste Capacity Table

Report Date: 06/20/2012

Facility: SMBSC Lime Storage Unit - LSU

Permit SW-282

Action: PER002

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WA ID	Waste Activity Type	Status	Permitted Area	Units	Permitted Capacity	Units	Design Capacity	Units	Comments
IL001	Industrial Waste Disposal Area	Open	38.00	acres	2,700,000.00	cubic yards	2,700,000.00	cubic yards	Phase 1 permitted in prior permit at 1,200,000 cubic yards in place in 2010.
IL002	Industrial Waste Disposal Area	Proposed	14.00	acres	1,000,000.00	cubic yards	2,100,000.00	cubic yards	Phase 2 is in the proposed stage only as per the application dated May 2, 2011
IL003	Industrial Waste Disposal Area	Never Built	0.00	acres	0.00	cubic yards	0.00	cubic yards	This was never proposed or built. Not sure how it got in here but it is off the records now.