



Minnesota Pollution Control Agency

520 Lafayette Road North | St. Paul, Minnesota 55155-4194 | 651-296-6300

800-657-3864 | 651-282-5332 TTY | www.pca.state.mn.us | Equal Opportunity Employer

DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT

Solid Waste Management Facility Permit

American Crystal Sugar/Crookston

Permit: SW-435

Action: PER006

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 American Crystal Sugar/Crookston, SW-435 under the conditions set forth in this permit.

The facility consists of 70 acres located in: Township 150 N, Range 47 W, Section 35, Polk County, in the MPCA Detroit Lakes Region. The facility includes the following waste activity area(s):

Industrial Waste Disposal Area

IL001

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

Ainars Z. Silis

Supervisor, Land Permits Unit

Land & Air Compliance Section

Industrial Division

DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT

Solid Waste Management Facility Permit

American Crystal Sugar/Crookston

Permit: SW-435

Action: PER006

The following permittee(s) are authorized to construct and operate the American Crystal Sugar/Crookston, SW-435 under the conditions set forth in this permit.

Permittee Activity Owner:

American Crystal Sugar Co

Address:

101 N 3rd St
Moorhead, MN 56560

Permittee Land Owner:

American Crystal Sugar Co

Address:

101 N 3rd St
Moorhead, MN 56560

Permittee Operator:

Address:

PO Box 600
Crookston, MN 567160600

DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT

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 "Commissioner" means the Commissioner of the Minnesota Pollution Control Agency, or any individual who is authorized to review and approve submittals on behalf of the Commissioner.
- 1.1.4 "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.
- 1.1.5 "Facility" has the meaning given in Minn. R. 7035.0300, subp. 37.
- 1.1.6 "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.
☐
- 1.1.7 "Permittee" means the American Crystal Sugar Company (ACS) who is the owner of the facility, landowner where the facility is located and operator of the facility.
- 1.1.8 "Waste Activity" means the storage, processing, transfer, utilization, treatment, or disposal of solid waste and waste by-products.
- 1.1.9 "Waste Activity Area" means the land, structures, monitoring devices, and other appurtenances and improvements on the land associated with a waste activity.

1.1.10 Waste Activities

- 1.1.11 The facility waste activities authorized by this permit are limited to those activities described in the Waste Capacity Table of this permit.

1.1.12 Permit Compliance

- 1.1.13 The Permittee shall keep the status of the permit current and up-to-date.

DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT
TOTAL FACILITY

General

- 1.1.14 The Permittee shall perform the actions or conduct the activity authorized by the permit in accordance with the plans and specifications approved by the agency, in accordance with all state and federal statutes, rules and regulations, and in compliance with the conditions of the permit.

1.1.15 Location

- 1.1.16 The facility authorized by this permit occupies approximately 70 acres within the 450-acre ACS plant located in Section 35, T150N, R47W, Polk County, Minnesota. The facility address is:

American Crystal Sugar Company
P.O. Box 600, U.S. Highway 75 South
Crookston, Minnesota 56716

1.1.17 Facility History

- 1.1.18 ACS has operated a sugar beet processing facility in Polk County, Minnesota, near the city of Crookston since 1953. Spent lime and coal ash are two regulated wastes that are generated as beets are processed into sugar. Initially, these two wastes were pumped as a slurry out to a settling basin. The settling basin was originally permitted by the Minnesota Pollution Control Agency (MPCA) Water Quality Division. In 1991, ACS installed a membrane filter press to dry the spent lime prior to disposal, thus creating a solid waste. The dry spent lime and coal ash continued to be placed on top of the now full settling basin. In 1993, the MPCA Solid Waste Division began negotiating a compliance agreement with ACS. The compliance agreement became effective in November 1994. It set forth interim operating requirements for the facility and established a schedule for obtaining a solid waste permit and achieving compliance with the solid waste statutes and rules. On February 29, 1996, the MPCA issued solid waste permit SW-435 to ACS authorizing the development of the first two of three phases at the facility. At that point, approximately 28,000 cubic yards of coal ash and 2.3 million cubic yards of spent lime had been disposed within or on top of the former settling basin. The 1996 permit allowed for an additional 843,900 cubic yards of spent lime and cover materials in Phases 1 and 2. Since 1993, ACS has contracted with a hauler to dispose of their coal ash at an off site permitted landfill. The permit was reissued on August 20, 2001, authorizing the continued development of Phase 2 and the development of Phase 3 of Disposal Area A.

DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT
TOTAL FACILITY

General

- 1.1.19 In correspondence dated July 31, 2002, the MPCA identified an old, unpermitted mud solids storage area that needed to be closed. According to the report titled Final Cover Construction Documentation, Disposal Area B Closure, submitted in April 2004, Closure of Area B was conducted in three phases. Phase 1 consisted of regrading the side slopes to ensure that a maximum 4:1 slope was achieved, with the majority of slopes being less than 5:1. The side slopes were also established to transition better between grades to allow establishment of vegetation. Phase 2 consisted of grading the top of Disposal Area B to promote surface water runoff. Phase 3 included the use of the area for land application of beet solids consistent with the requirements of permit SW-568 (Now SW-655).

1.1.20 Application for Permit modification (September 2004)/Change of Operational Plan For Landfill

- 1.1.21 In their September 2004 application for permit modification, the Permittee indicated their intent to dispose of lime waste in Disposal Area B, and also begin disposal of lime wastes in two new disposal areas, Disposal Area C and Disposal Area D. This permit authorizes the Permittee to dispose of spent lime in Disposal Area A, Disposal Area B, Disposal Area C and Disposal Area D. Disposal Area C will be developed by eliminating the "valley" between the permitted Disposal Area A and the new Disposal Area B. Disposal Area D will be constructed over the horseshoe shaped area adjacent to Disposal Area B where lime spalls have been historically stored. These revisions to the Lime storage area are shown on the engineering plan sheets in the permit application.

1.1.22 North Slope Failure

- 1.1.23 The north slope of Disposal Area A (North Slope) has experienced two distinct failures since December 2004. The initial failure occurred on December 6, 2004. The second failure occurred on August 26, 2005.
- 1.1.24 Each failure is discussed in the Summary Report and Recommendations for the Lime Waste Landfill North Slope Failure prepared by Wenck Associates, Inc. (Wenck) in March 2006. This report suggests that the initial failure in December 2004 was likely due to excessive pore pressures caused by high ground water levels caused by excessive rains. The second failure in August 2005 was due to flooding of a trench that had been dug at the bottom of the North Slope to replace a gravity surface water drain as part of the closure of Disposal Area A. The trench for the drain was left uncovered over a weekend. Wenck's analysis indicated that had the trench not been dug and left open with the subsequent rainfall, the second failure would not have occurred.

DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT
TOTAL FACILITY

General

- 1.1.25 The summary report includes the methods of investigation used to evaluate the failures. The report also includes recommendations to improve and monitor slope stability. Additionally the report suggests a possible future failure route which could occur due to the proximity of the Red Lake River. The analysis of this scenario shows that while there is no immediate danger for this type of failure, the necessary conditions could exist if sufficient erosion of a bank in the Red Lake River were to occur. It is important to note, that it was determined that this type of failure could occur along a line approximately perpendicular to the Red Lake River with or without the presence of the landfill.
- 1.1.26 In addition to the summary report indicated above the Permittee has submitted a geotechnical monitoring plan (Geotechnical Monitoring Plan for the Industrial Solid Waste Landfill) and a modified contingency action plan ((Modified Contingency Action Plan Spent Lime Landfill (Permit SW-435)) dated July 2006, each prepared by Wenck Associates, Inc. for the purposes of monitoring and assuring slope stability at the facility.
- 1.1.27 The Geotechnical Monitoring Plan establishes piezometers and inclinometers for the North Slope of Disposal Area A so that pore pressures and slope stability can be monitored regularly. The frequency of monitoring varies from monthly to weekly depending on rainfall, ground water levels and North Slope movement as determined by the North Slope inclinometers.
- 1.1.28 The Contingency Action Plan (CAP) and Post Closure Care (PCC) requirements established corrective actions for both inspection and event triggered contingencies. Some event triggered contingencies include natural disasters, vandalism, fire or slope failure requiring emergency response. More specifically, the CAP and PCC include a joint plan between the Permittee and the city of Crookston to address possible failure of the North Slope dike on the city of Crookston sewage treatment plant force main which is located at the base of the North Slope dike.
- 1.1.29 An additional matter for consideration is that the city of Crookston's municipal wastewater treatment plant force main traverses the toe of the North Slope dike. Therefore, it is possible that the integrity of the force main could be affected if there is a future failure of the North Slope dike. Spillage of sewage and/or spent lime may also be possible on the land adjoining the North Slope Dike and the Red Lake River. Part 1.6.4 of this permit, Contingency Action Plan, requires the modified contingency action plan to further address the need for a coordinated response level with the city of Crookston in the eventuality of a North Slope failure. This includes a demonstration of emergency preparedness to implement corrective measures. In addition, Part 1.2.7 and 1.2.8 (Cost Benefit Analysis: North Slope Disposal Area A) of this permit requires a preliminary cost benefit analysis of alternatives to stabilize the North Slope be done. Part 1.8.6 of this permit (Post Closure Care) also requires modification of the Post Closure Plan to address the eventuality of a North Slope failure after closure of the facility.

DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT
TOTAL FACILITY

General

1.1.30 Facility Description (as originally described in PER 004)

- 1.1.31 Failure of the North Slope has resulted in some changes to the phase development of the landfill. Phase 1 now involves bringing the wastes up to an intermediate grade, shaping the waste to allow for proper drainage and placing intermediate cover. Phase 1 has been completed. Phase 2 consists of continuing to fill Disposal Area A from north to south up to final refuse grades and placing final cover. This work is currently in progress and includes some regrading and changing some of the slopes from 5:1 to 7:1. Phase 3 will consist of continuing the fill from north to south by filling in Disposal Area C and hence to Disposal Area B starting by overriding the south slopes of Disposal Area A in a continuous operation. Phase 4 will continue from north to south across Disposal Area B and include Disposal Area D.
- 1.1.32 According to the 2005 annual report, the current permitted volume for spent lime waste for Disposal Area A is 3,238,700 cubic yards. Approximately 1,780,700 cubic yards was in place at the time the permit was initially issued in 1996. As of November 2005 the remaining permitted capacity for Disposal Area A is approximately 493,973 cubic yards (approximately 341,273 cubic yards of lime) including final cover. With continued use of Disposal Area B, as authorized herein, there is an additional disposal capacity of approximately 616,000 cubic yards over the approximately 1,000,000 cubic yards previously disposed and covered. Including an additional one time disposal of 40,000 cubic yards of mud solids approved by the Commissioner and implemented in January 2004 the total disposal capacity for Disposal Area B, C and D will be approximately 1,635,200 cubic yards. The total permitted disposal capacity for Disposal Areas A, B, C, and D is approximately 4,853,900 cubic yards. The estimated remaining life for the Disposal Areas A, B, C, and D is approximately 13 years (anticipated fill completion approximately 2019).
- 1.1.33 In addition to the disposal activities discussed above, spent lime and occasionally lime spalls are transported to the active fill area via end-dump trucks and deposited in small piles (individual truck loads) called "teepees". The spent lime is damp (approximately 30 percent moisture content) which enhances its natural compaction and suppresses dust generation. The teepees are placed contiguous to each other as closely as possible on a 24-hour, 7-days per week basis throughout the sugar beet campaign. The campaign begins in September and runs through May of the following year. Approximately 10 acres is needed during each campaign for teepee placement. Since the placement of the teepees occurs primarily during the winter months; and given the 30 percent moisture content of the spent lime, it is not practical to spread and compact the waste on a daily basis. At the end of the campaign, by no later than July 1st of each year, ACS is required to spread and compact the waste and place intermittent or intermediate cover as appropriate.

DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT
TOTAL FACILITY

General

1.1.34 Facility Description: Major Modification Permit No. PER 006 (September, 2011)

- 1.1.35 The major modification approved in Permit PER006 included a horizontal increase in facility footprint of 1.1 acres, from 68.2 acres to 69.3 acres, and a reduction in capacity of approximately 536,000 cy. The purpose of these changes are to buttress a portion of the northeast corner of Disposal Area A and reduce the slopes at that location as a means to properly repair a slope movement that has occurred within the landfill.
- 1.1.36 The buttressing of the northeast portion of Disposal Area A, will begin in the spring of 2012 and is expected to be completed in approximately one year. Fill will be removed from the Disposal Area B and moved to the northeast corner of Disposal Area A to develop the revised slopes (7:1 slope) and incorporate the buttress. Disposal Area B will be regraded and re-sloped to similarly reduce the slopes. Disposal Area C will remain open during the re-sloping of Disposal Areas A & B and filled upon completion of filling Disposal Areas A & B.
- 1.1.37 According to the application the total design capacity with these modifications will be approximately 4,318,100 cy with a current in place volume of 3,419,300 cy. The remaining capacity is approximately 848,800 cy (includes filling in the valley between Disposal areas A & C). The remaining life of the facility is expected to be approximately 6.2 years based on present disposal rates of spent lime, rock catcher material, lime spalls and demollition debris.

1.1.38 Environmental Review

- 1.1.39 Not applicable.

1.1.40 Variances

- 1.1.41 Not applicable.

1.1.42 Required Notices

- 1.1.43 The Permittee must notify the MPCA before transferring ownership or operation of a solid waste management facility during its operating life or during postclosure care period in accordance with Minn. R. 7035.2535, subp. 2.

1.2 Permit Documents

1.2.1 Approved Plans

- 1.2.2 The approved plans and engineering documents are incorporated into this permit. In addition, once approved by the Commissioner, the Permittee shall comply with all submittals that are submitted in accordance with the terms of this permit. In all cases where the permit and the plans or submittals differ, the requirements of the permit shall govern over a condition in the plan or submittal. The approval by the Commissioner of the plans and specifications shall not release the Permittee from any present or subsequent requirements of statutes, rules, regulations, or ordinances.

DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT
TOTAL FACILITY

Permit Documents

1.2.3 Permit Submittal

1.2.4 Permit / Agreement / Order in Effect. Except for backyard compost sites and sewage sludge landspreading facilities, a solid waste permit or permit modification is required to: A. treat, store, process or dispose of solid waste; B. establish, construct or operate a solid waste management facility; C. change, add or expand a permitted solid waste management facility. This permit is intended to meet this permit condition consistent with applicable laws, rules and regulations of Minnesota.

1.2.5 Permit Application

1.2.6 The permit application approved by this permit is titled Application for Industrial Solid Waste Permit Modification and Reissuance, American Crystal Sugar Company, Crookston, Minnesota Plant (SW-435) prepared for American Crystal Sugar Company September 2011 by Wenck Associates, Inc., Tony Rohs P.E. and signed and dated September 12, 2011.

1.2.7 Plans / Descriptions / Engineering Reports

1.2.8 The Permittee shall perform the actions or conduct the activity authorized by the permit in accordance with the plans and specifications approved by the agency and in compliance with the conditions of the permit.

1.2.9 Engineering Documents

1.2.10 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.

1.2.11 The engineering documents approved by this permit as incorporated into the application titled "Industrial Solid Waste Permit Modification" prepared by Wenck Associates, Inc. (Wenck) dated September 12, 2011, includes the following:

1. Design and Closure Report
2. Operations and Maintenance Plan
3. Post-Closure and Contingency Action Plan
4. Engineering Plan Sheets 1 through 12

DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT
TOTAL FACILITY

Permit Documents

- 1.2.12 Additional documents for a complete application for reissuance incorporating information which has been submitted since the application for modification includes information which considers the North Slope failure and related requirements needed to reissue the permit. Except as otherwise required by this permit, additional documents are approved upon issuance of this permit as follows:
1. Final Cover Construction Documentation Disposal Area B Closure American Crystal Sugar Company, Crookston, Minnesota Facility (SW-435), prepared by Wenck Associates, Inc. dated April 2004.
 2. Construction Documentation Report for Partial West Slope Final Comer, Lime Landfill American Crystal Sugar Company-Crookston, Minnesota Facility, prepared by Wenck Associates, Inc., dated January 2006.
 3. 2005 Annual Report American Crystal Sugar Crookston, Minnesota Industrial Solid Waste Facility, prepared by Wenck Associates, Inc., dated January 2006.
 4. Geotechnical Monitoring Plan for the Industrial Solid Waste Landfill Crookston, Minnesota Plant (SW-435), prepared by Wenck Associates, Inc., dated July 2006.
 5. Modified Contingency Action Plan Spent Lime Landfill (Permit #SW-435) prepared by Wenck Associates, Inc., dated July 2006.
 6. Construction Documentation Report for North Slope Final Cover Construction and Intermediate Cover Placement American Crystal Sugar Company-Crookston, Minnesota Facility, prepared by Wenck Associates, Inc., dated September 2006.

1.2.13 Cost Benefit Analysis: North Slope Disposal Area A (completed as per PER 004)

- 1.2.14 The Permittee completed the following reports regarding the North Slope Stabilization:
1. Lime Landfill: North Slope Stabilization Feasibility Study, dated July 2007 prepared by American Crystal Sugar Company by Wenck Associates, Inc. Tony S. Rohs, P.E.
 2. Construction Documentation Report, West Slope Relocation, Partial Final Closure, Lime Landfill Disposal Area (Permit # SW- 435) dated August 2009, prepared by American Crystal Sugar Company by Wenck Associates, Inc. Tony S. Rohs, P.E.

DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT
TOTAL FACILITY

Permit Documents

1.2.15 Hydrogeologic Evaluation Documents

1.2.16 The hydrogeologic evaluation documents approved by this permit include:

1. Phase I Preliminary Investigation Report, approved April 22, 1993
2. Phase II Detailed Site Investigation Work Plan, approved April 22, 1993
3. Phase II Detailed Site Investigation Report, approved June 24, 1994
4. Phase III Water Monitoring System Work Plan, approved June 24, 1994
5. Phase III Water Monitoring System Report, approved November 28, 1995
6. Phase IV Water Quality Monitoring Work Plan, approved November 28, 1995
7. Phase IV Water Quality Monitoring Report, approved November 28, 1995
8. Compliance Boundary, approved November 28, 1995
9. Groundwater Investigation of Nitrates Crookston, Minnesota-Industrial Solid Waste Disposal Facility, Permit #SW-435, prepared by Wenck Associates, Inc., dated August 2004.

1.2.17 Approved Plans

1.2.18 The approved plans are incorporated into this permit. In addition, the approved version of all pending submittals required by this permit are incorporated into this permit. In all cases where the permit and the plan or submittal differ, the requirements of the permit shall govern over a condition in the plan or submittal. The approval by the commissioner of the plans and specifications shall not release the Permittee from any present or subsequent requirement of statutes, rules, regulations, or ordinances.

The approved plans are incorporated herein Plan Sheets in the September 2011 Application for Industrial Solid Waste Permit Modification and Reissuance, American Crystal Sugar Company, Crookston, Minnesota Plant (SW-435) dated September 2011, Prepared for American Crystal Sugar Company by Wenck Associates Inc., Tony S. Rohs P.E. and described in the report and related plan sheets in Appendix A of the Permit Application.

1.2.19 Revised Plans

1.2.20 Any revised plans shall be submitted for approval by the Commissioner. The Permittee shall obtain approval from the Commissioner on all revised engineering and environmental monitoring plans prior to construction of the affected portion of the facility. Revised plans shall be consistent with Minn. R. 7035.1800.

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. 7035.2565 and 7035.2555.

DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT
TOTAL FACILITY

Design and Construction Criteria

1.3.3 Ground Water Quality, Surface Water Quality, Air Quality, and Soil Protection

- 1.3.4 The Permittee must locate, design, and construct the facility to prevent pollution of groundwater 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. The Permittee must design any proposed future expansions of the facility in accordance with this rule.

1.3.5 Storage Standards

- 1.3.6 The Permittee must construct the waste activity area where solid waste is stored in accordance with Minn. R. 7035.2855 except as provided in, subp. 1 and Minn. R. 7035.2525, subp. 2.

1.3.7 Storm Water Management System

- 1.3.8 The Permittee shall construct and certify the storm water management system for the facility with Best Management Practices to manage storm water discharge in accordance with the National Pollutant Discharge Elimination System/State Disposal System (NPDES/SDS) Permit for the discharge of storm water associated with an industrial activity and/or a construction activity.

The issuance of this permit does not release the Permittee from the obligation to obtain an NPDES/SDS permit.

- 1.3.9 The Permittee must design and construct 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.

1.3.10 Construction Plan

- 1.3.11 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.

1.3.12 Construction Notification

- 1.3.13 The Permittee must notify appropriate MPCA staff at least ten (10) working days in advance of the construction of the facility or any component thereof unless the Commissioner orders otherwise.

1.3.14 Construction Certification

- 1.3.15 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.

1.3.16 Alterations and Additions

- 1.3.17 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 the written consent of the commissioner.

DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT
TOTAL FACILITY

1.4 Operating and Maintenance Criteria

1.4.1 Trained/Certified Operator

1.4.2 The Permittee must ensure that the required number of operators, trained or certified under Minn. R. 7035.2545 and Minn. R. 7048.0100 to 7048.1300, are present and/or available at all times that the facility is open for the purpose of receiving waste.

1.4.3 Personnel Training

1.4.4 The Permittee must establish and maintain a personnel training program consisting of classroom instruction and on-the-job training. The program must address the requirements identified in Minn. R. 7035.2545, subp. 3, and must include the specific training necessary to perform the tasks associated with each solid waste management area within the facility. The Permittee must maintain a record of all personnel training and submit the dates of training in the annual report.

1.4.5 Operations Manual (Operations and Maintenance Plan)

1.4.6 The Permittee must prepare and maintain an operations and maintenance manual for the facility. The manual must include operations and maintenance criteria that are specific to each solid waste management area within the facility.

The Permittee's Operations and Maintenance Manual submitted with the approved application is approved by the issuance of this permit.

1.4.7 Security

1.4.8 The Permittee must prevent unauthorized entry onto the facility in accordance with Minn. R. 7035.2535, subp. 3. A gate must be provided at the entrance to the site, and kept locked when the attendant is not on duty. In addition, the Permittee shall post a sign at the entrance of the facility and each waste activity area showing the facility name, MPCA permit number, hours of operation, the acceptable waste, and any other relevant information. For the purposes of this permit the gate shall be the gate to the American Crystal Sugar Beet Processing Plant in Crookston, Minnesota.

1.4.9 Roads

1.4.10 The Permittee must construct and maintain all-weather approach and access roads to all waste activity areas within the facility.

1.4.11 Storage of Solid Waste

1.4.12 The Permittee must provide for the satisfactory storage of all solid waste accumulated at the facility in accordance with Minn. R. 7035.0700, Minn. R. 7035.2855 and any applicable permit issued by the MPCA.

1.4.13 Nuisance Conditions

1.4.14 The Permittee must keep the facility grounds and immediately adjacent property free of litter stemming from the facility operations. The facility grounds shall be inspected at least once per week.

1.4.15 The Permittee must manage the facility to be in compliance with Minn. R. 7011.0150 to prevent particulate matter from becoming airborne.

DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT
TOTAL FACILITY

Operating and Maintenance Criteria

1.4.16 The Permittee must manage all free liquids that have come in contact with solid waste so that the liquids are not discharged as storm water.

1.4.17 The Permittee must provide effective measures to control flies, rodents and other insects or vermin as necessary.

1.4.18 Collection and Transportation of Solid Waste

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

1.4.20 Unacceptable Wastes

1.4.21 The Permittee must not accept specific wastes for treatment storage, processing, or disposal in accordance with Minn. R. 7035.2535, subp. 1. The following wastes are not acceptable for disposal except as approved by the commissioner: (1) hazardous wastes; (2) infectious wastes; (3) radioactive wastes; (4) waste oil; (5) wastes containing free liquids or free liquids; (6) wastes containing any of the following: digested sewage sludges, grit chamber cleanings, bar cleanings or bar screenings.

1.4.22 Storm Water Management System

1.4.23 The Permittee shall operate and maintain the storm water management system for the facility with Best Management Practices to manage storm water discharges in accordance with the National Pollutant Discharge Elimination System/State Disposal System (NPDES/SDS) Permit for the discharge of storm water associated with an industrial activity and/or a construction activity.

1.4.24 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.

1.4.25 Ground Water Quality, Surface Water Quality, Air Quality, and Soil Protection

1.4.26 The Permittee must 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.

1.4.27 Emergency Equipment

1.4.28 The Permittee must provide and maintain adequate emergency equipment to control accidental fires, and make arrangements with the local fire protection agency to immediately acquire their services when needed. The Permittee must also provide adequate communications equipment for emergency purposes. Specifically, the Permittee maintains fire extinguishers throughout the facility and is located within the limits of the city of Crookston and as such has fire protection services with the city of Crookston Fire Department.

1.4.29 Permittee Inspections

1.4.30 The Permittee must perform general inspections in accordance with Minn. R. 7035.2535, subp. 4. The Permittee must record inspections in an inspection log or summary and must keep these records for at least five years after the date of inspection.

DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT
TOTAL FACILITY

Operating and Maintenance Criteria

1.4.31 Operator Facility Inspection Schedule

1.4.32 The owner or operator must develop and follow a written schedule for inspecting the facility and facility equipment in accordance with Minn. R. 7035.2535, subp. 4. The owner or operator must retain a copy of the inspection schedule at the facility. This information shall become a part of the operations and maintenance manual and kept on the American Crystal Sugar Processing Plant site.

1.4.33 Operating Record

1.4.34 The Permittee must keep a written operating record at the facility in accordance with Minn. R. 7035.2575.

1.4.35 Sanitary Facilities and Shelter

1.4.36 Sanitary facilities and shelter must be available for site personnel. For the purposes of this permit the sanitary facilities at the Sugar Beet Processing Plant can be the facilities that are available for site personnel.

1.4.37 Closure Plan

1.4.38 The Permittee must maintain a copy of the approved facility closure plan, and all revisions to the plan, at the facility until closure is completed and certified in accordance with Minn. R. 7035.2635.

1.5 Reporting Criteria

1.5.1 Annual Facility Report

1.5.2 The Permittee shall submit an Annual Facility Report for the preceding calendar year in accordance with Minn. R. 7035.2585. The annual facility report must be submitted to the Commissioner by February 1 of each year. The report must include summary evaluation reports and specific annual reporting requirements, including inclinometer and piezometer readings for the North Slope. The submittal date is also indicated in the Required Actions and Submittal part of this permit.

1.5.3 Electronic Data Reporting

1.5.4 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.

1.5.5 The Permittee is also required to submit a paper copy of all water monitoring reports as outlined in the Required Actions and Submittals Table(s) unless otherwise required by the Commissioner.

DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT
TOTAL FACILITY

Reporting Criteria

1.5.6 Monitoring Station Location Information

- 1.5.7 At the time of issuance of this permit, all wells used for monitoring are currently installed and elevation data exists for each of these wells. Location and elevation data shall be collected for any new or additional monitoring points. 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 and ground surface. The depth of wells from the riser pipe must also be identified. If existing data is being reported the surveying method and datum used to collect this information must be identified.

1.6 Contingency Action Criteria

1.6.1 Contingency Action Plan

- 1.6.2 The Permittee has prepared and must maintain the approved contingency action plan at the solid waste facility. The Permittee shall address all facility waste activities in the approved plan in accordance with Minn. R. 7035.2615 and the terms and conditions of this permit.
- 1.6.3 The Permittee must implement the actions necessary to comply with requirements in accordance with Minn. R. 7035.2815, subp. 15.

1.6.4 Emergency Procedures Manual

- 1.6.5 The owner or operator of a solid waste management facility must prepare and maintain at the facility a procedural manual for facility personnel to use in time of emergency. For the purposes of this permit, including the emergency procedures in the Operations and Maintenance Manual and maintaining a copy of the Operations and Maintenance Manual at the Sugar Beet Processing Plant, meets this requirement.

1.6.6 Emergency Preparedness and Prevention

- 1.6.7 The Permittee must 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 or the environment in accordance with Minn. R. 7035.2595.
- 1.6.8 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.

1.7 Closure Criteria

1.7.1 Facility Closure

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

1.7.3 Closure Plan and Procedures

- 1.7.4 The Permittee must perform closure for each waste activity as specified in the approved plans and specifications, and in accordance with Minn. R. 7035.2635.

DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT
TOTAL FACILITY

Closure Criteria

- 1.7.5 The Permittee must complete closure activities for the waste activity area in accordance with the closure plan within 180 days following the beginning of closure as specified in the closure procedures above.

1.8 Postclosure Criteria

1.8.1 Postclosure Plan

- 1.8.2 The Permittee must comply with postclosure requirements in the approved plan in accordance with Minn. R. 7035.2645 and 7035.2815, subp. 16, item B.
- 1.8.3 The Permittee must keep a copy of the approved plan and amendments at the Sugar Beet Processing Plant until the postclosure care period begins. During the postclosure care period, the plan must be kept by the contact person identified in Minn. R. 7035.2645, subp. 2, item C.

1.8.4 Postclosure Care

- 1.8.5 The Permittee must perform postclosure care in accordance with Minn. R. 7035.2655, subp. 1 and the terms and conditions of the approved plan.
- 1.8.6 The Permittee must conduct postclosure care for 20 years.

1.8.7 Postclosure Use of Property

- 1.8.8 The Permittee must comply with postclosure use of property requirements in accordance with Minn. R. 7035.2655, subp. 2.

1.9 Financial Criteria

1.9.1 Cost Estimates

- 1.9.2 The Permittee must keep the latest cost estimates for each waste activity for Contingency Action, Facility Closure and Facility Postclosure Care at the Sugar Beet Processing Plant during the operating life of the facility, prepared in accordance with Minn. R. 7035.2685, subp. 2.

1.10 General Conditions

1.10.1 Release

- 1.10.2 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.

DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT
TOTAL FACILITY

General Conditions

1.10.3 Future Changes

1.10.4 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.

1.10.5 Rights and Privilege

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

1.10.7 Enforcement

1.10.8 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.

1.10.9 Performance

1.10.10 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.

1.10.11 Operation and Maintenance

1.10.12 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.

1.10.13 Honesty

1.10.14 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.

1.10.15 Timely Information Submittal

1.10.16 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.

DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT
TOTAL FACILITY

General Conditions

1.10.17 Access

1.10.18 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.

1.10.19 Discovery of Noncompliance

1.10.20 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.

1.10.21 Notification of Noncompliance

1.10.22 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.

1.10.23 Reporting of Noncompliance

1.10.24 The Permittee shall report noncompliance with the permit not reported in the Notification of Noncompliance subheading above by submitting the information listed in Notification of Noncompliance within 30 days of the discovery of the noncompliance.

1.10.25 Alterations

- 1.10.26 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.
- 1.10.27 The 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 conditions of the permit.

DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT
TOTAL FACILITY

General Conditions

1.10.28 Responsibility for Damage

1.10.29 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.

1.10.30 Modifying or Revoking Permit

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

1.10.32 Severability

1.10.33 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.

1.10.34 Extensions

1.10.35 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.

1.10.36 Term of Permit

1.10.37 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 no later than 180 calendar days before the expiration date of the permit.

1.10.38 Retention of Records

1.10.39 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 also maintain an operating record in accordance with Minn. R. 7035.2575 until closure of each waste activity at the facility.

1.10.40 As-built Plans

1.10.41 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.

DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT
TOTAL FACILITY

General Conditions

1.10.42 Construction Certification

1.10.43 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 a letter stating that the certification submitted is complete and approved.

1.10.44 Financial Assurance

1.10.45 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 approved the financial assurance amount and instrument to be used for the facility in accordance with Minn. R. 7035.2665 to 7035.2805. At this time, the Permittee is not required to establish a formal financial assurance mechanism with the MPCA. The Commissioner reserves the right to require a financial assurance mechanism in the future if deemed necessary and specifically will consider the need for such mechanism based on the report required in Part 1.2.7 Cost Benefit Analysis: North Slope, of this permit.

DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT

2. INDUSTRIAL WASTE DISPOSAL AREA IL 001

2.1 Design and Construction Criteria

2.1.1 Design Requirements

2.1.2 The Permittee must design and construct the disposal area or any proposed future expansion or modification of the disposal area in accordance with this permit and Minn. R. 7035.1590 to 7035.2500.

2.1.3 Prohibited Areas

2.1.4 The disposal of industrial solid waste is prohibited within the areas outlined in Minn. R. 7035.1600.

2.1.5 Construction Requirements

2.1.6 The Permittee must construct or install the phases, cells, liners, leachate management system, gas management system and water monitoring system of the industrial landfill in accordance with the approved plans and specifications.

2.1.7 Attenuation Zone

2.1.8 The separation distance between the lowest portion of the facility and the high water table must be a minimum of five feet. In lieu of this separation distance, the facility has been constructed over a former slurry pond with a compacted clay liner.

2.1.9 Intermittent, Intermediate and Final Cover Systems

2.1.10 The Permittee must design a cover system or any proposed future expansion or modification of the disposal area in accordance with Minn. R. 7035.1700, subp. D and Y.

2.1.11 Soils intended for use as cover material must be evaluated in accordance with Minn. R. 7035.2815, subp. 8, as applicable.

2.1.12 Gas Monitoring, Collection, and Treatment System

2.1.13 The Permittee monitored the facility for four years for gas migration from approximately 1997 through 2001. Landfill gas does not appear to be migrating from this facility at levels of concern. In addition, given the hydrogeologic characteristics of the site, gas migration is not expected to occur. Therefore the Commissioner is waiving the requirements of Minn. R. 7035.1700, subp. U at this time.

2.1.14 Water Monitoring Systems

2.1.15 The Permittee must design and install a water monitoring system in compliance with Minn. R. 7035.2815, subp. 10.

2.1.16 Run-on / Run-off Control System

2.1.17 The Permittee must design and construct a run-on system to prevent flow onto the waste activity area, and a run-off control system to collect and control at least the water volume resulting from a 25 year, 24 hour, storm event.

DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT
INDUSTRIAL WASTE DISPOSAL AREA IL 001

2.2 Operating and Maintenance Criteria

2.2.1 Maintenance and Operation

2.2.2 The Permittee must operate and maintain the disposal area in accordance with the terms and conditions of this permit and practices outlined in Minn. R. 7035.1590 to Minn. R. 7035.2500 unless otherwise approved by the Commissioner.

2.2.3 Commencing Operations

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 Property Line Separation

2.2.6 A minimum separation distance of 20 feet must be maintained between the disposal operation and the adjacent property line, unless otherwise approved by the Commissioner.

2.2.7 Leachate Control

2.2.8 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.

2.2.9 Working Face

2.2.10 The Permittee must limit the disposal of industrial waste to as small an area as practicable by using appropriate facilities to confine wind-blown material within the area.

2.2.11 Compaction

2.2.12 The Permittee must spread and compact the Industrial solid waste as densely as practicable.

2.2.13 Grading

2.2.14 The Permittee must construct the disposal area so that cover material can be graded to promote surface water runoff with minimal erosion.

2.2.15 Dust Control

2.2.16 The Permittee must provide adequate dust control so as to minimize the emission of dust from the facility.

2.2.17 Litter Control

2.2.18 The Permittee, at the conclusion of each day of operation, must collect and return to the disposal area, all litter resulting from the operation of the lime landfill.

2.2.19 Vermin Control

2.2.20 The Permittee must assure that necessary effective means are taken to control flies, rodents, and other insects or vermin.

2.2.21 Soil Stockpile

2.2.22 The Permittee shall maintain an available supply of suitable cover material on site.

DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT
INDUSTRIAL WASTE DISPOSAL AREA IL 001

Operating and Maintenance Criteria

2.2.23 Intermittent Cover

2.2.24 The Permittee must provide at least six inches of suitable on-site soils ("beet " soils) as intermittent cover. Placement of Intermittent cover shall be on all active waste areas at the end of each campaign unless otherwise required or approved by the Permittee. Intermittent cover may be removed prior to placing or removing additional waste (lime material).

2.2.25 Intermediate Cover

2.2.26 The Permittee must provide Intermediate cover on the disposal area in areas that will not receive a subsequent layer of waste for at least a 120 day period. Intermediate cover must consists of on-site soils ("beet" soils) which are at least 12 inches thick. Areas that will not receive additional waste within six months of placing intermediate cover shall be seeded to provide erosion protection.

2.2.27 Final Cover

2.2.28 The Permittee shall apply final cover consistent with the MPCA approved operation and maintenance plan.

2.2.29 Final Cover Vegetation

2.2.30 The Permittee must provide a finished surface of the filled area covered and maintained with adequate top soil and seeded to provide suitable vegetation immediately upon completion, or immediately in the spring on areas terminated during winter conditions. The Permittee must provide mulch on the seeded slopes to prevent erosion.

2.2.31 Emergency Equipment

2.2.32 The Permittee must provide equipment at the disposal area (i.e. fire extinguishers), during the hours of operation, to control accidental fires. The Permittee must make arrangements with the local fire protection agency (city of Crookston Fire Department) to immediately acquire their services when needed. The Permittee shall provide adequate emergency communication facilities.

2.2.33 Water Monitoring Systems

2.2.34 The Permittee must maintain a water monitoring system in compliance with Minn. R. 7035.2815, subp. 10. The Permittee must operate and maintain the water monitoring system accordance with the approved plans and specifications and the operation and maintenance manual.

2.2.35 Stormwater Management

2.2.36 The Permittee must operate and maintain the stormwater management system for the disposal area with the Best Management Practices to manage stormwater discharges in accordance with the National Pollutant Discharge Elimination System (NPDES) Permit for the discharge of stormwater associated with an industrial and/or construction activity.

DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT
INDUSTRIAL WASTE DISPOSAL AREA IL 001

2.3 Monitoring Criteria

2.3.1 Hydrogeologic Evaluation

2.3.2 The Permittee must complete a hydrogeologic evaluation in accordance with Minn R. 7035.1700, subp. S and Minn. R. 7035.2815, subp. 3.

2.3.3 Compliance Boundary

2.3.4 The Permittee must establish compliance boundaries according to Minn. R. 7035.2815, subp. 4, items A through E.

2.3.5 Ground Water Performance Standards

2.3.6 The Permittee must design, construct, operate, and maintain the disposal area to achieve compliance with the analytical limits set forth in the Limits Table(s) of this permit. These limits are based upon the Minnesota Department of Health, Health Risk Limits (HRL), Health-Based Values (HBV), Risk Assessment Advice (RAA) and Maximum Contaminate Levels (MCL) and 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.

2.3.7 Water Quality Sampling and Analysis

2.3.8 If requested by the Commissioner, the Permittee must conduct surface water quality sampling and analysis. The Permittee must conduct the sampling according to the Commissioners' request and any schedule shown in the Limits Table(s) of this permit.

2.3.9 Background Water Quality Monitoring

2.3.10 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.

2.3.11 Monitoring Protocol

2.3.12 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.

2.3.13 Ground Water Quality Sampling and Analysis

2.3.14 The Permittee must conduct groundwater 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.

2.3.15 Surface Water Quality Monitoring

2.3.16 If requested by the Commissioner, the Permittee shall collect water levels in the condenser pond consistent with such request and or as identified in the Limits Table(s) of this permit. Monitoring must be conducted according to the schedule shown in the Limits Table(s) of this permit.

2.3.17 Exceedence of Intervention Limit

2.3.18 The Permittee must take the actions listed in Minn. R. 7035.2815, subp. 4, item G., if an intervention limit established in this permit is exceeded.

DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT
INDUSTRIAL WASTE DISPOSAL AREA IL 001

Monitoring Criteria

2.3.19 Establishing an Up-gradient or Ambient Monitoring Well.

- 2.3.20 Within 180 days of permit issuance the permittee must have constructed and baseline sampled an upgradient or ambient monitoring well. This well must be located in an area that is upgradient or side-gradient of the landfill, and is not influenced by any ACS site activity including wastewater spray irrigation or land application of any ACS by-products.

2.4 Reporting Criteria

2.4.1 Routine Monitoring Reporting

- 2.4.2 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.

2.4.3 Annual Monitoring Evaluation

- 2.4.4 The Permittee shall submit an annual water monitoring evaluation report in accordance with Minn. R. 7035.2585 and 7035.2815, subp. 14, item Q. 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.

2.4.5 Annual Waste Activity Report

- 2.4.6 The Permittee shall submit an annual report in accordance with Minn. R. 7035.2585, 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.

LIMITS TABLE

Comments:

Report Date: 06/12/2012

Facility: American Crystal Sugar/Crookston

Permit SW-435

Standard Landfill Monitoring Periods:

Spring: Mar-28 to May-14

Summer: Jul-01 to Jul-31

Fall: Oct-01 to Oct-31

DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT

This Limits Table applies to the following stations:

Condenser Pond

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

Permit Issued:

Permit Expires:

LIMITS TABLE

Comments:

Report Date: 06/12/2012

Facility: American Crystal Sugar/Crookston

Permit SW-435

Standard Landfill Monitoring Periods:

Spring: Mar-28 to May-14

Summer: Jul-01 to Jul-31

Fall: Oct-01 to Oct-31

DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT

This Limits Table applies to the following stations:

MW-1 , MW-202LF , MW-3 , MW-4 , P-7

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: 06/12/2012

Facility: American Crystal Sugar/Crookston

Permit SW-435

Standard Landfill Monitoring Periods:

Spring: Mar-28 to May-14

Summer: Jul-01 to Jul-31

Fall: Oct-01 to Oct-31

DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT

This Limits Table applies to the following stations:

MW-101 , MW-2 , MW-201LF , MW-203LF

Analyte	CAS/EMMI#	Intervention Limit	Units	Frequency	Comments
Alkalinity, Total as CaCO3	T-0-05	-	mg/L	Spring	
Aluminum	742-99-05	-	ug/L	Spring	
Ammonia Nitrogen	766-44-17	-	mg/L	Spring	Ground water standards
Ammonia, Unionized	PCA-01-3	-	mg/L	Spring	
Appearance	1	-	N/A	Spring	
Arsenic	744-03-82	2.5	ug/L	Spring	
Barium	744-03-93	500.0	ug/L	Spring	
Boron	744-04-28	250.0	ug/L	Spring	
Cadmium	744-04-39	1.0	ug/L	Spring	
Calcium	744-07-02	-	mg/L	Spring	
Chemical Oxygen Demand (COD)	C-0-04	-	mg/L	Spring	
Chloride	168-87-006	-	mg/L	Spring	
Chromium	744-04-73	25.0	ug/L	Spring	If total Cr > 100 ug/L must speciate for Cr+6
Cobalt	744-04-84	7.5	ug/L	Spring	
Copper	744-05-08	-	ug/L	Spring	
Dissolved Oxygen, Field	T-1-05	-	mg/L	Spring	
Dissolved Solids, Total	C-0-10	-	mg/L	Spring	
Eh (Oxidation potential)	4	-	meq/L	Spring	
Hardness, Carbonate	PCA-01-4	-	mg/L	Spring	
Iron	743-98-96	-	ug/L	Spring	
Lead	743-99-21	1.25	ug/L	Spring	
Magnesium	743-99-54	-	ug/L	Spring	
Manganese	743-99-65	75.0	ug/L	Spring	
Mercury	743-99-76	0.5	ug/L	Spring	
Nickel	744-00-20	25.0	ug/L	Spring	
Nitrate + Nitrite	C-0-05	2,500.0	ug/L	Spring	
pH	C-0-06	-	SU	Spring	
Phosphorus	772-31-40	-	ug/L	Spring	
Potassium	744-00-97	-	ug/L	Spring	
Selenium	778-24-92	7.5	ug/L	Spring	
Sodium	744-02-35	-	ug/L	Spring	

Permit Issued:

Permit Expires:

LIMITS TABLE

Comments:

Report Date: 06/12/2012

Facility: American Crystal Sugar/Crookston

Permit SW-435

Standard Landfill Monitoring Periods:

Spring: Mar-28 to May-14

Summer: Jul-01 to Jul-31

Fall: Oct-01 to Oct-31

DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT

This Limits Table applies to the following stations:

MW-101 , MW-2 , MW-201LF , MW-203LF

Analyte	CAS/EMMI#	Intervention Limit	Units	Frequency	Comments
Specific Conductance	C-0-11	-	umho/cm	Spring	
Static Water Level (Elevation, MSL)	PCA-00-1	-	ft	Spring and Fall	
Sulfate	148-08-798	-	mg/L	Spring	
Suspended Solids, Total	C-0-09	-	mg/L	Spring	
Temperature	T-1-21	-	Deg C	Spring	
Turbidity, Field	G-0-19	-	NTU	Spring	
Zinc	744-06-66	500.0	ug/L	Spring	

Permit Issued:

Permit Expires:

LIMITS TABLE

Comments:

Report Date: 06/12/2012

Facility: American Crystal Sugar/Crookston

Permit SW-435

Standard Landfill Monitoring Periods:

Spring: Mar-28 to May-14

Summer: Jul-01 to Jul-31

Fall: Oct-01 to Oct-31

DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT

This Limits Table applies to the following stations:

MW-102 , MW-5 , MW-6 , MW-7

Analyte	CAS/EMMI#	Intervention Limit	Units	Frequency	Comments
Alkalinity, Total as CaCO3	T-0-05	-	mg/L	Spring	
Aluminum	742-99-05	1,072.0	ug/L	Spring	
Ammonia Nitrogen	766-44-17	-	mg/L	Spring	
Ammonia, Unionized	PCA-01-3	40.0	mg/L	Spring	
Appearance	1	-	N/A	Spring	
Arsenic	744-03-82	360.0	ug/L	Spring	
Barium	744-03-93	2,130.0	ug/L	Spring	N & E sides have a surface water compliance box
Boron	744-04-28	250.0	ug/L	Spring	
Cadmium	744-04-39	73.1	ug/L	Spring	
Calcium	744-07-02	-	mg/L	Spring	
Chemical Oxygen Demand (COD)	C-0-04	-	mg/L	Spring	
Chloride	168-87-006	860.0	mg/L	Spring	
Chromium VI	185-40-299	16.0	ug/L	Spring	
Cobalt	744-04-84	436.0	ug/L	Spring	
Copper	744-05-08	34.1	ug/L	Spring	
Dissolved Oxygen, Field	T-1-05	-	mg/L	Spring	
Dissolved Solids, Total	C-0-10	-	mg/L	Spring	
Eh (Oxidation potential)	4	-	meq/L	Spring	
Hardness, Carbonate	PCA-01-4	-	mg/L	Spring	
Iron	743-98-96	1,363.0	ug/L	Spring	
Lead	743-99-21	197.3	ug/L	Spring	
Magnesium	743-99-54	-	ug/L	Spring	
Manganese	743-99-65	75.0	ug/L	Spring	
Mercury	743-99-76	0.0069	ug/L	Spring	
Nickel	744-00-20	2,549.0	ug/L	Spring	
Nitrate + Nitrite	C-0-05	2,500.0	ug/L	Spring	
pH	C-0-06	-	SU	Spring	
Phosphorus	772-31-40	-	ug/L	Spring	
Potassium	744-00-97	-	ug/L	Spring	
Selenium	778-24-92	20.0	ug/L	Spring	
Sodium	744-02-35	-	ug/L	Spring	

Permit Issued:

Permit Expires:

LIMITS TABLE

Comments:

Report Date: 06/12/2012

Facility: American Crystal Sugar/Crookston

Permit SW-435

Standard Landfill Monitoring Periods:

Spring: Mar-28 to May-14

Summer: Jul-01 to Jul-31

Fall: Oct-01 to Oct-31

DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT

This Limits Table applies to the following stations:

MW-102 , MW-5 , MW-6 , MW-7

Analyte	CAS/EMMI#	Intervention Limit	Units	Frequency	Comments
Specific Conductance	C-0-11	-	umho/cm	Spring	
Static Water Level (Elevation, MSL)	PCA-00-1	-	ft	Spring and Fall	
Sulfate	148-08-798	-	mg/L	Spring	
Suspended Solids, Total	C-0-09	-	mg/L	Spring	
Temperature	T-1-21	-	Deg C	Spring	
Turbidity, Field	G-0-19	-	NTU	Spring	
Zinc	744-06-66	211.0	ug/L	Spring	

Permit Issued:

Permit Expires:

Required Actions and Submittals Table

Report Date: 06/12/2012

Facility: American Crystal Sugar/Crookston

Permit SW-435

Action: PER006

DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT

Subject Item I.D. Total Facility

Required Actions/Submittals

Frequency/Due Date	Action or Submittal	Requirement
TBD	Submit Permit Application	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.
Annually	Submit Annual Facility Report	The Permittee shall submit an Annual Facility Report for the preceding calendar year in accordance with Minn. R. 7035.2585. The annual facility report must be submitted to the Commissioner by February 1 of each year. The report must include summary evaluation reports and specific annual reporting requirements, including inclinometer and piezometer readings for the North Slope. The submittal date is also indicated in the Required Actions and Submittal part of this permit.

Subject Item I.D. IL001

Required Actions/Submittals

Frequency/Due Date	Action or Submittal	Requirement
Annually	Submit Annual Water Monitoring Evaluation Report	An annual water monitoring evaluation report must be submitted by February 1 of each year in accordance with Minn. R. 7035.2585 and 7035.2815, subp. 14, item Q. The report must include a summary and discussion of the monitoring results for the preceding calendar year.
Annually	Submit Spring Water Monitoring Report	A fall water monitoring report must be submitted with the annual report by February 1 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.

Waste Capacity Table

Report Date: 06/12/2012
Facility: American Crystal Sugar/Crookston
Permit SW-435
Action: PER006

		<i>DRAFT</i>	<i>DRAFT</i>	<i>DRAFT</i>	<i>DRAFT</i>	<i>DRAFT</i>	<i>DRAFT</i>	<i>DRAFT</i>	<i>DRAFT</i>	
WA ID	Waste Activity Type	Status	Permitted Area	Units	Permitted Capacity	Units	Design Capacity	Units	Comments	
IL001	Industrial Waste Disposal Area	Open	70.00	acres	4,853,900.00	cubic yards	4,853,900.00	cubic yards	Area A,B,C, and D	