Minnesota Pollution Control Agency
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Solid Waste Management Facility Permit **Permit:** SW-433
American Crystal Sugar/Moorhead 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/Moorhead, SW-433 under the conditions set forth in this permit.

The facility consists of 320 acres located in: Township 140 N, Range 48 W, Section 33, Clay 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 and Water Quality Permits Section
Industrial Division

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Solid Waste Management Facility Permit **Permit:** SW-433
American Crystal Sugar/Moorhead Action: PER006

The following permittee(s) are authorized to construct and operate the American Crystal Sugar/Moorhead, SW-433 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:
American Crystal Sugar Co

Address:
2500 11th St N
Moorhead, MN 56560

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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 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 development 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 Minnesota Pollution Control Agency (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 "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 ten-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 the Permittee has submitted detailed engineering plans for the use and closure of the that follow-on disposal space.

1.1.6 "Permittee" means the American Crystal Sugar Company who is the owner of the facility, land owner where the facility is located and the operator of the facility.

1.1.7 "Spent Lime" means precipitated calcium carbonate which is formed as a precipitate during the purification process at the sugar beet processing plant.

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.

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TOTAL FACILITY

General

1.1.12 Location

1.1.13 The facility authorized by this permit occupies approximately 74 acres within the 320-acre American Crystal Sugar Company (ACS) plant located in Sections 32 and 33, T140N, R48W, Clay County, Minnesota. The facility address is:

American Crystal Sugar Company
Box 1037, 2500 North 11th Street
Moorhead, Minnesota 56560

1.1.14 Facility History

1.1.15 ACS has operated a sugar beet processing facility in Clay County, Minnesota, near the city of Moorhead since the late 1940's. Spent lime and coal ash are two regulated wastes that are generated as beets are processed into sugar. Initially, these two wastes were pumped to processing plant wastewater settling basins as a slurry. The settling basins were originally permitted by the MPCA Water Quality Division. In 1990, 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 basins.

1.1.16 In 1993, the MPCA Solid Waste Division began negotiating a compliance agreement with ACS. The compliance agreement was put into effect in November 1994, and 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.

1.1.17 Beginning in September 1993, ACS contracted with the nearby Fargo Landfill for disposal of boiler coal ash. From 1999 through the fall of 2002, Moorhead boiler coal ash was disposed at the USPCI facilities in Sawyer, ND. Since the fall of 2002, the ACS-Moorhead facility has disposed of its coal ash at the Clay County municipal landfill. The ACS-Moorhead facility generates approximately 4,000 to 5,000 tons (3,700 to 4,600 cubic yards) of boiler coal ash annually.

1.1.18 On February 29, 1996, the MPCA issued solid waste permit SW-433 to ACS authorizing the development of Phases 1A, 1B, and 2 at the facility. At that time, approximately 37,000 cubic yards of coal ash and 3.05 million cubic yards of spent lime and cover materials had been disposed within or on top of the former settling basins. The 1996 permit allowed for the placement of an additional 955,800 cubic yards of spent lime and cover materials in Phases 1A, 1B and 2.

1.1.19 On March 24, 1999, the MPCA approved an amendment to the facility's closure plan that authorized ACS to final cover the west cell with beet soils over a three year period. Final cover for the west cell was completed during 2001. In 2005 ACS requested to reopen the west cell for further placement of mud solids. The MPCA approved this request with the reissuance of the permit on March 15, 2007.

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General

1.1.20 ACS submitted a revised permit application on August 13, 2001, requesting authorization to accept wasted digester sludge at their industrial solid waste landfill. The application for permit reissuance in 2005 included a similar request but added the anaerobic digester sludge. These biological sludges are wasted periodically to maintain the wastewater treatment plant system efficiency and provide sufficient capacity for incoming wastewater treatment. The composition of these materials includes plant matter, sugars and other plant proteins. This material will either be disposed with the spent lime or used as intermittent or intermediate cover material under this permit. Some of the material will also be land applied in accordance with the requirements of permit # SW-568. The estimated volume of these sludges is approximately 6000 cubic yards per year or less than 10% the annual disposal rate of spent lime.

1.1.21 In 2004, final cover was applied to a portion of the south slope of the east half of the Solid Waste Disposal Area. The area covered was approximately 2.4 acres.

1.1.22 During 2005, there was partial final cover construction for the south slope of the east cell of the Solid Waste Disposal Area. The area covered was approximately 1.4 acres adjacent to the landfill area where partial cover was applied in 2004.

1.1.23 The MPCA approved a modification to the permit during reissuance in 2005 to increase the design capacity as well as the permitted capacity from 5,975,400 cubic yards to 6,719,500 cubic yards of spent lime and unregulated wastes including lime spalls, mud pressed solids, beet tailings and rocks. This quantity includes the 3,087,000 cubic yards in place prior to the initial landfill permit in 1996. The increase is a result of the increased capacity remaining in the west cell and by overfilling the haul road between the east and west cells.

1.1.24 The 2013 reissuance of the permit will maintain 6,719,500 cubic yards as the design capacity as well as the permitted capacity of the facility.

1.1.25 Additional final cover construction was completed along the eastern slope of the east cell during the summer of 2012. Approximately 2.8 acres of the east cell adjacent to the previously covered areas received final cover. This construction increased the total area of the east cell that has received final cover to 6.6 acres.

1.1.26 Facility Description

1.1.27 The facility authorized by this permit is an industrial solid waste land disposal facility. As stated above, The Water Quality portion of the facility accepted 37,000 cubic yards of coal ash and 3.05 million cubic yards of spent lime for a total of 3.087 million cubic yards prior to being required by the Commissioner to obtain a solid waste permit. The solid waste portion of the facility is being developed in five phases. Phase 1A involved bringing the east cell up to a minimum two percent slope, placing intermediate cover to provide drainage to the north and providing a stable surface on which continued operations could occur. Phase 1A was completed in 1999.

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General

1.1.28 Phase 1B was completed in 2001 and resulted in placement of final cover over the west cell. Phase 1C continued placement of beet soils on the west cell as shown on the approved plans. Phase 1 was completed in 2006 when the west cell was brought to a flat surface with an elevation of approximately 930 feet.

1.1.29 At the time of issuance of this permit, the operating disposal area is located in the east cell (35 acres) of the original disposal area. The west half of the facility, which is approximately 39 acres, has been previously filled to a elevation of approximately 930 feet.

1.1.30 Phase 2 consists of continuing the fill by bringing the east half of the facility to final grade and progressing north until final grade is reached over the entire east half of the facility. Completion of Phase 2 is expected to take approximately 2 to 3 years. At the completion of Phase 2 the east half of the facility will be filled and closed. During operation and after placement of final cover, surface water will be routed north to the stabilization ponds.

1.1.31 Phase 3 will consist of reopening and filling the west cell of the facility and overfilling the existing road between the east and west cells from south to north. Phase 3 will take approximately 18 years to complete for a total life span for Phase 2 and 3 of approximately 21 years. Closure procedures will be initiated as final grades are reached. During filling operations and upon closure, surface water runoff will be directed north to the stabilization pond.

1.1.32 The estimated facility lifespan of 21 years is based on historical annual waste disposal rates. Spent lime removal operations beginning in 2012 may increase the lifespan of the facility beyond 21 years due to lower quantities of waste being disposed of annually.

1.1.33 Spent lime and occasionally spent lime spalls, are transported to the active fill area via end-dump trucks and deposited in small piles (individual truck loads) called "teepees". Approximately 10 acres is needed during each campaign for teepee placement. The sugar beet processing campaign begins in September and runs through May of the following year. The teepees are placed contiguous to each other as closely as possible on a 24-hour, 7-day per week basis throughout the sugar beet campaign. Because of the 30 percent moisture content of the spent teepees, it is not practical to spread and compact this waste on a daily basis during the winter months. Consequently, the permit requires the Permittee to spread and compact the waste and place appropriate intermittent or intermediate cover at the end of the campaign by no later than July 1st of each year.

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1.2 Permit Documents

1.2.1 Permit Submittal

1.2.2 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: (1) treat, store, process or dispose of solid waste; (2) establish, construct or operate a solid waste management facility; (3) 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.

1.2.3 Plans / Description / Engineering Reports

1.2.4 The permittee shall perform the actions or conduct the activity authorized by the permit in accordance with the plans and specifications approved by the MPCA and in compliance with the conditions of the permit.

1.2.5 Permit Application

1.2.6 The permit application approved by this permit is signed and dated November 6, 2012.

1.2.7 Engineering Documents

1.2.8 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.

1.2.9 The engineering documents approved by this permit are entitled "Industrial Solid Waste Application for Permit Reissuance" prepared by Wenck Associates, Inc. (Wenck) dated October 2012 which provides:

1. Design and Closure Report
2. Operations and Maintenance Plan
3. Post-Closure and Contingency Action Plan
4. Engineering Plan Sheets 1 through 8

1.2.10 Hydrogeologic Evaluation Documents

1.2.11 The hydrogeologic evaluation documents approved by this permit were prepared by Wenck and include:

1. Phase I Preliminary Investigation Report, dated March 1993.
2. Phase II Detailed Site Investigation Work Plan, dated March 1993.
3. Phase II Detailed Site Investigation Report, dated September 1993.
4. Phase III Water Monitoring System Work Plan, dated May 1994.
5. Phase III Water Monitoring System Report, dated November 1994.
6. Phase IV Water Quality Monitoring Work Plan, dated November 1994.
7. Phase IV Water Quality Monitoring Report, dated January 1995.
8. Compliance Boundary, dated November 1994.

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Permit Documents

1.2.12 Approved Plans

1.2.13 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 ordinance.

1.2.14 Revised Plans

1.2.15 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. 7035.2555.

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 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.

1.3.5 Storage Standards

1.3.6 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.

1.3.7 Consistent with this permit and the application, the waste disposal area at the ACS Moorhead facility has been approved for storage of spent lime prior to spent lime being used as an agricultural liming product.

1.3.8 Storm Water Management System

1.3.9 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) Permit for the discharge of storm water associated with an industrial activity and/or a construction activity.

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Design and Construction Criteria

1.3.10 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.

1.3.11 Construction Plan

1.3.12 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.

1.3.13 Construction Notification

1.3.14 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.

1.3.15 Construction Certification

1.3.16 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.

1.3.17 Alterations and Additions

1.3.18 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.

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 and Minn. R. 7035.2855 and any applicable permit issued by the MPCA.

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. 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.

1.4.7 Required Notices

1.4.8 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.

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TOTAL FACILITY

Operating and Maintenance Criteria

1.4.9 Security

1.4.10 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 Moorhead, Minnesota.

1.4.11 Certified Operator

1.4.12 The disposal area must be operated by a certified operator, as defined in Minn. R. 7048.0100 to 7048.1300, and in accordance with Minn. R. 7035.1700 item P. A certified operator must be available during the time that the disposal area is open to accept waste. All operations must conform to state and federal site safety regulations.

1.4.13 General Inspection

1.4.14 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.

1.4.15 Personnel Training

1.4.16 Facility personnel must successfully complete a program of classroom instruction or on-the-job training to maintain compliance with Minn. R. 7035.2525 to 7035.2915. In addition, the Annual Facility Report shall include a record of classroom instruction and on-the-job training.

1.4.17 Storm Water Management System

1.4.18 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 NPDES Permit for the discharge of storm water associated with an industrial activity and/or a construction activity.

1.4.19 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.

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

1.4.21 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.

1.4.22 Operating Record

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

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Operating and Maintenance Criteria

1.4.24 Sanitary Facilities and Shelter

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

1.5 Reporting Criteria

1.5.1 Annual Facility Report

1.5.2 In lieu of the monthly reports required by Minn. R. 7035.1700, item x, the permittee shall submit an annual facility report for the preceding calendar year in accordance with Minn. R. 7035.2585. The report must include summary evaluation reports and specific annual reporting requirements. The permittee shall submit the report to the commissioner according to the schedule in the Required Actions and Submittals Table(s) 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 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.

1.5.6 Monitoring Station Location Information

1.5.7 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, which 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 and ground surface. The depth of the well from the top of the riser pipe must also be identified. If existing data is being reported, the surveying method and datum used to collect the information must be identified.

1.6 Contingency Action Criteria

1.6.1 Contingency Action Plan

1.6.2 The permittee must prepare and maintain an 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.

1.6.3 The permittee must implement the actions necessary to comply with requirements in accordance with Minn. R. 7035.2815, subp. 15.

TOTAL FACILITY

Contingency Action Criteria

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 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.

1.6.8 Emergency Procedures

1.6.9 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

1.7.4 The permittee must close the facility and each waste activity as specified in the approved plan in accordance with Minn. R. 7035.2625. A copy of the approved plan must be kept at the Sugar Beet Processing Plant until closure is completed and certified under Minn. R. 7035.2635.

1.7.5 The permittee must meet the closure requirements specified in Minn. R. 7035.2815, subp. 16, item A.

1.7.6 Closure Procedures

1.7.7 The permittee must perform closure in accordance with Minn. R. 7035.2635.

1.7.8 The permittee must complete closure activities in accordance with the closure plan within 180 days following the beginning of closure.

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.

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TOTAL FACILITY

Postclosure Criteria

1.8.4 Postclosure Care

1.8.5 The permittee must perform postclosure care in accordance with Minn. R. 7035.2655, subp. 1.

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 current cost estimates for each waste activity for facility Contingency Action, Closure, and Post Closure 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 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.

1.10.3 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.

1.10.4 Future Changes

1.10.5 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.

1.10.6 Rights and Privilege

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

1.10.8 Enforcement

1.10.9 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.

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TOTAL FACILITY

General Conditions

1.10.10 Performance

1.10.11 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.

1.10.12 Operation and Maintenance

1.10.13 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.

1.10.14 Honesty

1.10.15 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.

1.10.16 Timely Information Submittal

1.10.17 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.

1.10.18 Access

1.10.19 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.

TOTAL FACILITY

General Conditions

1.10.20 Discovery of Noncompliance

1.10.21 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.

1.10.22 Notification of Noncompliance

1.10.23 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.

1.10.24 Reporting of Noncompliance

1.10.25 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.

1.10.26 Alterations

1.10.27 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.

1.10.28 Transferability

1.10.29 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.

1.10.30 Responsibility for Damage

1.10.31 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.

TOTAL FACILITY

General Conditions

1.10.32 Modifying or Revoking Permit

1.10.33 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.

1.10.34 Severability

1.10.35 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.

1.10.36 Extensions

1.10.37 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.

1.10.38 Term of Permit

1.10.39 This permit is valid until the expiration date unless revoked or modified by the MPCA pursuant to Minn. R. 7001.0170 to 7001.0180.

1.10.40 Retention of Records

1.10.41 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.

1.10.42 As-built Plans

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 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.

1.10.44 Construction Certification

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 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.

TOTAL FACILITY

General Conditions

1.10.46 Financial Assurance

1.10.47 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 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.

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2. INDUSTRIAL WASTE DISPOSAL AREA IL 001

2.1 Design and Construction Criteria

2.1.1 Design

2.1.2 The permittee must design and construct 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 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.

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.

2.1.9 Attenuation Zone

2.1.10 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 settling basin with a compacted clay liner.

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.

2.1.13 Cover Materials Evaluation

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

2.1.15 Gas Monitoring System

2.1.16 The permittee must design a gas monitoring system to meet the requirements of Minn. R. 7035.1700, subp. U.

2.1.17 Water Monitoring Systems

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

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 to Minn. R. 7035.2500 unless otherwise allowed by this permit.

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.

INDUSTRIAL WASTE DISPOSAL AREA IL 001

Operating and Maintenance Criteria

2.2.5 Property Line Separation

2.2.6 A minimum separation distance of 20 feet, or greater as specified by the commissioner, must be maintained between the disposal operation and the adjacent property line.

2.2.7 Operations Equipment

2.2.8 Equipment must be available for adequate operation of the disposal area. The equipment must be provided with adequate safety devices and adequate noise control devices.

2.2.9 Roads

2.2.10 The approach road to the disposal area and the access road on the disposal area must be of all weather construction and maintained in good condition so that they will be passable at all times for any vehicle using the disposal area.

2.2.11 Leachate Control

2.2.12 Industrial solid waste must not be deposited in a manner that allows material or leaching therefrom to cause pollution of ground water or surface water. Approved leachate collection and treatment systems must be used where required to protect ground water and surface water.

2.2.13 Working Face

2.2.14 Disposal of industrial solid waste must be limited to as small an area as practicable and with appropriate facilities to confine wind-blown material within the area.

2.2.15 Compaction

2.2.16 Industrial solid waste must be compacted as densely as practicable.

2.2.17 Grading

2.2.18 The disposal area must be constructed and cover material graded to promote surface water runoff without excessive erosion.

2.2.19 Dust Control

2.2.20 Adequate dust control must be provided.

2.2.21 Litter Control

2.2.22 At the conclusion of each day of operation, all wind-blown material resulting from the operation must be collected and returned to the disposal area by the permittee.

2.2.23 Vermin Control

2.2.24 Effective means must be taken if necessary to control flies, rodents, and other insects or vermin.

2.2.25 Soil Stockpile

2.2.26 The permittee shall maintain an available supply of suitable cover material on site.

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INDUSTRIAL WASTE DISPOSAL AREA IL 001

Operating and Maintenance Criteria

2.2.27 Intermittent Cover

2.2.28 Intermittent cover shall consist of on-site soils ("beet" soils, permit approved digester sludges) placed at least six inches thick. Intermittent cover shall be placed on waste areas at the end of each campaign. Intermittent cover may be removed prior to placing additional waste.

2.2.29 Intermediate Cover

2.2.30 Intermediate cover shall be placed in areas that will not receive a subsequent layer of waste for at least a 120 day period. Intermediate cover consists of on-site soils ("beet" soils, permit approved digester sludges) placed 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.

2.2.31 Alternative Cover

2.2.32 The permittee may use an alternate cover material with prior approval from the commissioner. Materials proposed for alternative cover use shall:

==> Not have a strong or offensive odor;
==> Not pose a dusting problem after application is complete;
==> Not be stockpiled in such a way as to generate contact with water released to surface water or ground water; and,
==> Not pose a threat to facility workers.

2.2.33 The commissioner approves of the use of digester sludge as an alternative intermittent and intermediate cover material. The permittee shall report in the Annual Facility Report the amount and location of digester sludge used as intermittent and intermediate cover material.

2.2.34 Final Cover

2.2.35 Final cover must be applied and maintained consistent with the MPCA approved operation and maintenance plan and the approved plans.

2.2.36 Final Cover Vegetation

2.2.37 The finished surface of the filled area must be 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. If necessary, seeded slopes must be covered with mulch to prevent erosion.

2.2.38 Spent Lime Removal

2.2.39 Precipitated calcium carbonate (spent lime) is classified as a by-product of lime in accordance with Minnesota Department of Agriculture requirements and MPCA solid waste rules. This classification allows spent lime to be used as a liming agent on Minnesota cropland.

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INDUSTRIAL WASTE DISPOSAL AREA IL 001

Operating and Maintenance Criteria

2.2.40 ACS provides spent lime to area farmers for use as an agricultural soil amendment. Spent lime is transported from the processing plant filter press area to the lime disposal area for temporary storage until it can be loaded onto trucks for land application. Spent lime is loaded all year with maximum use on a crop seasonal basis corresponding to pre-planting and post-harvest months.

2.2.41 Beginning in 2012, demand for spent lime as a soil enrichment agent exceeded the amount annually produced by ACS's sugar purification process. This permit authorizes the permittee to remove spent lime previously disposed of during past campaigns from the waste disposal area in order to meet market demand for an agricultural soil amendment.

2.2.42 Removal of spent lime from the waste disposal area will follow a "last in first out" management strategy. Spent lime from the most recent campaign will be removed first. If demand exceeds the quantity from the previous campaign, spent lime that has been placed and compacted from previous campaigns will be removed. The removal process will reverse the vertical area filling utilized to place the spent lime.

2.2.43 Spent lime removal operations will be limited to a working face of 10 acres or less as is done with spent lime disposal.

2.2.44 Spent lime to be removed is limited to material within Phase 2 above an elevation of 923 feet. Any additional spent lime removal operations are not permitted without written approval from the MPCA.

2.2.45 The amount of material added to or removed from the waste disposal area will depend on the current market demand for spent lime. Variable market conditions may extend the life of the disposal facility beyond 21 years.

2.2.46 Emergency Equipment

2.2.47 Equipment must be provided and kept at the disposal area during the hours of operation to control accidental fires, and arrangements must be made with the local fire protection agency to immediately acquire their services when needed. Adequate communication facilities must be provided for emergency purposes.

2.2.48 Gas Monitoring

2.2.49 The permittee must maintain a gas monitoring system in accordance with the documents listed in the Permit Documents heading.

2.2.50 Water Monitoring System

2.2.51 The permittee must maintain a water monitoring system in compliance with Minn. R. 7035.2815, subp. 10.

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.

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INDUSTRIAL WASTE DISPOSAL AREA IL 001

Monitoring Criteria

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 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 (see immediately below requirement for Manganese) 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.

2.3.7 Exceedence of Intervention Limit

2.3.8 If an intervention limit established in this permit is exceeded, the permittee must take the actions listed in Minn. R. 7035.2815, subp. 4, item G.

2.3.9 Water Quality Sampling and Analysis

2.3.10 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.

2.3.11 Background Water Quality Monitoring

2.3.12 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.

2.3.13 Monitoring Protocol

2.3.14 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.

Monitoring Criteria

2.3.15 Ground Water Quality Sampling and Analysis

2.3.16 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.

2.3.17 Surface Water Quality Sampling and Analysis

2.3.18 Surface 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.

2.3.19 Gas Monitoring

2.3.20 The permittee must implement a gas monitoring program and conduct quarterly methane monitoring, at a minimum, in and around facility structures and on the facility property boundary in accordance with Minn. R. 7035.2815, subp. 11.

2.3.21 Precipitated Calicum Carbonate

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

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 Reporting

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 The permittee shall submit an annual gas monitoring evaluation report summarizing the results of the quarterly methane monitoring in accordance with Minn. R. 7035.2815, supb. 11 and 40 CFR Part 258, subp. C, Sec. 258.23. 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. The monitoring results must be accompanied by information sufficient to establish the reliability, precision, and accuracy of the reported values.

LIMITS TABLE

Comments:

Report Date: 02/14/2013
Facility: American Crystal Sugar/Moorhead
Permit SW-433

Standard Landfill Monitoring Periods:
Spring: Mar-28 **to** May-14
Summer: Jul-01 **to** Jul-31
Fall: Oct-01 **to** Oct-31

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This Limits Table applies to the following stations:
GP-101 , GP-102 , GP-103 , GP-104

Analyte	CAS/EMMI#	Intervention Limit	Units	Frequency	Comments
LEL	PCA-01-0	25.0	%	Quarterly	
Methane Gas	PCA-01-1	1.25	%	Quarterly	

Permit Issued:
Permit Expires:

LIMITS TABLE

Comments:

Report Date: 02/14/2013
Facility: American Crystal Sugar/Moorhead
Permit SW-433

Standard Landfill Monitoring Periods:
Spring: Mar-28 **to** May-14
Summer: Jul-01 **to** Jul-31
Fall: Oct-01 **to** Oct-31

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This Limits Table applies to the following stations:
MW-101 , MW-3R , MW-4 , MW-7 , MW-8

Analyte	CAS/EMMI#	Intervention Limit	Units	Frequency	Comments
Alkalinity, Total as CaCO3	T-0-05	-	mg/L	Fall	
Appearance	1	-	N/A	Fall	
Barium	744-03-93	500.0	ug/L	Fall	
Boron	744-04-28	250.0	ug/L	Fall	
Copper	744-05-08	-	ug/L	Fall	
Dissolved Oxygen, Field	T-1-05	-	mg/L	Fall	
Eh (Oxidation potential)	4	-	meq/L	Fall	
Hardness, Carbonate	PCA-01-4	-	mg/L	Fall	
Manganese	743-99-65	1,470.0	ug/L	Fall	
Nickel	744-00-20	25.0	ug/L	Fall	
Nitrate + Nitrite	C-0-05	2,500.0	ug/L	Fall	
pH	C-0-06	-	SU	Fall	
Specific Conductance	C-0-11	-	umho/cm	Fall	
Static Water Level (Elevation, MSL)	PCA-00-1	-	ft	Fall	
Suspended Solids, Total	C-0-09	-	mg/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: 02/14/2013
Facility: American Crystal Sugar/Moorhead
Permit SW-433

Standard Landfill Monitoring Periods:
Spring: Mar-28 **to** May-14
Summer: Jul-01 **to** Jul-31
Fall: Oct-01 **to** Oct-31

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This Limits Table applies to the following stations:
MW-2 , MW-3

Analyte	CAS/EMMI#	Intervention Limit	Units	Frequency	Comments
Alkalinity, Total as CaCO3	T-0-05	-	mg/L	Fall	
Appearance	1	-	N/A	Fall	
Barium	744-03-93	500.0	ug/L	Fall	
Boron	744-04-28	250.0	ug/L	Fall	
Copper	744-05-08	1,000.0	ug/L	Fall	
Dissolved Oxygen, Field	T-1-05	-	mg/L	Fall	
Eh (Oxidation potential)	4	-	meq/L	Fall	
Hardness, Carbonate	PCA-01-4	-	mg/L	Fall	
Manganese	743-99-65	1,470.0	ug/L	Fall	
Nickel	744-00-20	25.0	ug/L	Fall	
Nitrate + Nitrite	C-0-05	2,500.0	ug/L	Fall	
pH	C-0-06	-	SU	Fall	
Specific Conductance	C-0-11	-	umho/cm	Fall	
Static Water Level (Elevation, MSL)	PCA-00-1	-	ft	Fall	
Suspended Solids, Total	C-0-09	-	mg/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: 02/14/2013
Facility: American Crystal Sugar/Moorhead
Permit SW-433

Standard Landfill Monitoring Periods:
Spring: Mar-28 **to** May-14
Summer: Jul-01 **to** Jul-31
Fall: Oct-01 **to** Oct-31

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This Limits Table applies to the following stations:
MW-201

Analyte	CAS/EMMI#	Intervention Limit	Units	Frequency	Comments
Alkalinity, Total as CaCO3	T-0-05	-	mg/L	Fall	
Aluminum	742-99-05	-	ug/L	Fall	
Ammonia Nitrogen	766-44-17	-	mg/L	Fall	
Appearance	1	-	N/A	Fall	
Arsenic	744-03-82	2.5	ug/L	Fall	
Barium	744-03-93	2,000.0	ug/L	Fall	
Boron	744-04-28	250.0	ug/L	Fall	
Cadmium	744-04-39	1.0	ug/L	Fall	
Calcium	744-07-02	-	mg/L	Fall	
Chloride	168-87-006	-	mg/L	Fall	
Chromium	744-04-73	100.0	ug/L	Fall	If total Cr > 100 ug/L must speciate for Cr+6
Cobalt	744-04-84	7.5	ug/L	Fall	
Copper	744-05-08	1,000.0	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	-	meq/L	Fall	
Hardness, Carbonate	PCA-01-4	-	mg/L	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	75.0	ug/L	Fall	
Mercury	743-99-76	0.5	ug/L	Fall	
Nickel	744-00-20	25.0	ug/L	Fall	
Nitrate + Nitrite	C-0-05	2,500.0	ug/L	Fall	
pH	C-0-06	-	SU	Fall	
Phosphorus	772-31-40	-	ug/L	Fall	
Potassium	744-00-97	-	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	Fall	

Permit Issued:
Permit Expires:

LIMITS TABLE

Comments:

Report Date: 02/14/2013
Facility: American Crystal Sugar/Moorhead
Permit SW-433

Standard Landfill Monitoring Periods:
Spring: Mar-28 **to** May-14
Summer: Jul-01 **to** Jul-31
Fall: Oct-01 **to** Oct-31

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This Limits Table applies to the following stations:
MW-201

Analyte	CAS/EMMI#	Intervention Limit	Units	Frequency	Comments
Sulfate	148-08-798	-	mg/L	Fall	
Suspended Solids, Total	C-0-09	-	mg/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: 02/14/2013
Facility: American Crystal Sugar/Moorhead
Permit SW-433

Standard Landfill Monitoring Periods:
Spring: Mar-28 **to** May-14
Summer: Jul-01 **to** Jul-31
Fall: Oct-01 **to** Oct-31

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This Limits Table applies to the following stations:
P-8

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

Permit Issued:
Permit Expires:

LIMITS TABLE

Comments:

Report Date: 02/14/2013
Facility: American Crystal Sugar/Moorhead
Permit SW-433

Standard Landfill Monitoring Periods:
Spring: Mar-28 **to** May-14
Summer: Jul-01 **to** Jul-31
Fall: Oct-01 **to** Oct-31

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This Limits Table applies to the following stations:
SG-1 , SG-2

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: 02/14/2013
Facility: American Crystal Sugar/Moorhead
Permit SW-433

Standard Landfill Monitoring Periods:
Spring: Mar-28 **to** May-14
Summer: Jul-01 **to** Jul-31
Fall: Oct-01 **to** Oct-31

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This Limits Table applies to the following stations:
SW-1 , SW-2

Analyte	CAS/EMMI#	Intervention Limit	Units	Frequency	Comments
Alkalinity, Total as CaCO3	T-0-05	-	mg/L	Fall	
Ammonia Nitrogen	766-44-17	40.0	ug/L	Fall	
Appearance	1	-	N/A	Fall	
Barium	744-03-93	1,000.0	ug/L	Fall	
Boron	744-04-28	500.0	ug/L	Fall	
Cadmium	744-04-39	3.4	ug/L	Fall	
Chloride	168-87-006	100,000.0	ug/L	Fall	
Chromium	744-04-73	50.0	ug/L	Fall	If total Cr > 100 ug/L must speciate for Cr+6
Copper	744-05-08	23.0	ug/L	Fall	
Dissolved Oxygen, Field	T-1-05	-	mg/L	Fall	
Dissolved Solids, Total	C-0-10	700.0	mg/L	Fall	
Eh (Oxidation potential)	4	-	meq/L	Fall	
Hardness, Carbonate	PCA-01-4	-	mg/L	Fall	
Manganese	743-99-65	1,000.0	ug/L	Fall	
Mercury	743-99-76	0.0069	ug/L	Fall	Use lower detection limits
Nickel	744-00-20	213.0	ug/L	Fall	
Nitrate + Nitrite	C-0-05	250.0	ug/L	Fall	
pH	C-0-06	-	SU	Fall	
Selenium	778-24-92	5.0	ug/L	Fall	
Specific Conductance	C-0-11	1,000.0	umho/cm	Fall	
Suspended Solids, Total	C-0-09	-	mg/L	Fall	
Temperature	T-1-21	-	Deg C	Fall	
Turbidity, Field	G-0-19	-	NTU	Fall	
Zinc	744-06-66	86.0	ug/L	Fall	

Permit Issued:
Permit Expires:

LIMITS TABLE

Comments:

Report Date: 02/14/2013
Facility: American Crystal Sugar/Moorhead
Permit SW-433

Standard Landfill Monitoring Periods:
Spring: Mar-28 **to** May-14
Summer: Jul-01 **to** Jul-31
Fall: Oct-01 **to** Oct-31

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This Limits Table applies to the following stations:
WP-2 , WP-7 , WP-8

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

Permit Issued:
Permit Expires:

Required Actions and Submittals Table

Report Date: 02/14/2013

Facility: American Crystal Sugar/Moorhead

Permit SW-433

Action: PER006

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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	An annual facility report for the preceding calendar year must be submitted to the Commissioner by February 1 of each year. The report must include the information identified in Minn. R. 7035.2585 and include summary evaluation reports and specific annual reporting requirements for each waste activity.

Subject Item I.D. IL001

Required Actions/Submittals

Frequency/Due Date	Action or Submittal	Requirement
Annually	Submit Annual Gas Monitoring Evaluation Report	An annual gas monitoring report must be submitted to the Commissioner as part of the annual report by February 1 of each year. The report must summarize the results of the quarterly methane monitoring in accordance with Minn. R. 7035.2815, supb. 11 and 40 CFR Part 258, subp. C, Sec. 258.23.
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.

Permit Issued:

Permit Expires:

Waste Capacity Table

Report Date: 02/14/2013
Facility: American Crystal Sugar/Moorhead
Permit SW-433
Action: PER006

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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	80.00	acres	6,719,500.00	cubic yards	6,719,500.00	cubic yards	

Permit Issued:

Permit Expires: