Solid Waste Management Facility Permit

Sherco Unit 3 AQCS Solids Landfill

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 Sherco Unit 3 AQCS Solids Landfill, SW-293 under the conditions set forth in this permit.

The landfill facility consists of approximately 95 acres located in: Township 34 N, Range 29 W, Section 35, Sherburne County, in the MPCA 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
Solid Waste Management Facility Permit
Sherco Unit 3 AQCS Solids Landfill

Permit: SW-293
Action: PER009

The following permittee(s) are authorized to construct and operate the Sherco Unit 3 AQCS Solids Landfill, SW-293 under the conditions set forth in this permit.

Permittee Activity Owner: Xcel Energy Inc
Address: 250 Marquette Avenue, Suite 800
Minneapolis, MN  55401

Permittee Land Owner: Xcel Energy Inc
Address: 250 Marquette Avenue, Suite 800
Minneapolis, MN  55401

Permittee Operator: Xcel Energy Inc
Address: 13999 Industrial Boulevard
Becker, MN  55308
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, stormwater 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 "Exterior slopes" are defined as those slopes where runoff would not be contained within the landfill lined area, but instead run off to the ground outside the fill area or other unlined areas.

1.1.6 "Facility" has the meaning given in Minn. R. 7035.0300, subp. 37.

1.1.7 "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 that the Permittee has submitted detailed engineering plans for the use and closure of that follow-on disposal space.

1.1.8 "Permittee" means the landowner, facility owner(s), and facility operator(s).

1.1.9 "Waste Activity" means the storage, processing, transfer, utilization, treatment, or disposal of solid waste and waste by-products.

1.1.10 "Waste Activity Area" means the land, structures, monitoring devices, and other appurtenances and improvements on the land associated with a waste activity.
Total Facility

General

1.1.11 General Facility Description

1.1.12 The Facility authorized by this permit is an industrial solid waste disposal facility which is being developed in two phases.

The Facility has been used and will continue to be used to dispose primarily of Coal Combustion Residuals (CCR) from Air Quality Control System (AQCS) and demolition debris that contains coal or CCR, generated at Sherco Unit No. 3 and any of the other Xcel Energy coal combustion facilities.

1.1.13 In previous permits the Sherco Unit 3 Landfill plan was divided into three major phases. In a more recent permit that phase development plan was merged into a two phase plan and that two phase plan continues in this permit action. As shown in the engineering plans, Phase I encompasses approximately 70 acres and includes Cells 1, 2A, 2B, and 2C. As of October, 2013 the Phase 1 in-place volume was 5,705,742 cubic yards (CY) and the remaining capacity was 748,968 CY resulting in a total Phase 1 permitted capacity of 6,454,710 CY.

Phase II is expected to ultimately consist of seven cells and encompass approximately 75 acres. Cells 3 and 4 of Phase II construction have been authorized by previous permits and Cell 3 was constructed in 2009. Cell 4 and 5 construction is anticipated during the 10 year life of this permit. The ultimate capacity for Cells 3, 4 and 5 of Phase II is 8,138,959 cubic yards. Phase I plus the previously developed area in Cell 3 of Phase II plus anticipated cells 4 and 5 construction, is expected to result in a total approved permitted capacity in this permit term of 14,593,669 CY.

Future development of Phase II is expected to consist of Cells 6 through 9. The design capacity for the facility for Phase I (Cells 1 & 2) and Phase II (Cells 3, 4 & 5 and 6 through 9) is 27,063,331 CY.

1.1.14 Waste Activities

1.1.15 The facility waste activities authorized by this permit are limited to those activities described in the Waste Capacity Table of this permit. The waste disposed at the facility consists of the following materials generated at any of Xcel Energy's coal combustion facilities:

- CCR (which includes fly ash, flue gas desulfurization (FGD) scrubber solids, bottom ash, activated carbon, lime, and other additives);
- Demolition debris that contains coal or CCR including any process equipment that can no longer be used such as piping, hoses, filter bags, air heater baskets, re-heater tubes, and spray nozzles.
- Any wastes associated with the operation of the AQCS.

1.1.16 Permit Compliance

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

1.1.18 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.

1.1.19 Location

1.1.20 The Facility, authorized by this permit, is a 144.88-acre site located in Section 35, Township 34N, Range 29W, Becker Twp., Sherburne County, Minnesota. The Facility is located within the Minnesota Environmental Quality Board-approved boundary in which the Northern States Power (NSP) Sherburne County Electrical Generating Plant (Sherco) is located.

Facility History

1.1.21 The original permit issuance was on March 12, 1986, for construction and operation of Phase 1, Cell 1. The Cell 1 liner was constructed in 1986. That permit authorized disposal of a total of 1.6 million cubic yards of compacted, in-place fly ash, bottom ash and final cover material. The Cell 1 liner consists of a 60 mil High Density Polyethylene (HDPE) geomembrane.

The permit was reissued on April 5, 1993, and included approval for construction of Phase I, Cell 2 for an additional capacity of 3.386 million CY. The total capacity of the facility by addition of Cell 2 was increased to 4.6 million CY of compacted in-place nonhazardous industrial solid waste. Cell 2A was constructed in 1994 with an HDPE over 2 feet of engineered recompacted clay (HDPE/2CCL).

The Permit was subsequently reissued on February 9, 1999.

1.1.22 The permit was reissued on December 2, 2004. This permit provided conditional approval of a design including an HDPE flexible membrane liner over a Geosynthetic Clay Liner (GCL) as a composite liner system for Cell 2C of the facility. The Permittee was required to conduct the Geomembrane Leak Location Survey when installation of the drainage layer was complete.

This permit allows the reduction of the 2-foot drainage layer over the composite liner to 1-foot; it waives the requirement for a frost protection layer in areas where a HDPE/GCL composite liner system is used. This permit also allows for the Cementitious crust of CCR to be qualified as intermediate cover in lieu of 12 inches of soil cover only on interior slopes. If disposal areas on any exterior slopes will be exposed to the elements for a period of 120 days or longer, an intermediate cover totaling at least 12 inches of compacted, suitable cover material must be provided and maintained.

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1.1.24 This permit allows the reduction of the 2-foot drainage layer over the composite liner to 1-foot; it waives the requirement for a frost protection layer in areas where a HDPE/GCL composite liner system is used. This permit also allows for the Cementitious crust of CCR to be qualified as intermediate cover in lieu of 12 inches of soil cover only on interior slopes. If disposal areas on any exterior slopes will be exposed to the elements for a period of 120 days or longer, an intermediate cover totaling at least 12 inches of compacted, suitable cover material must be provided and maintained.

1.1.25 Required Notices

1.1.26 The Permittee shall 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.

1.2.3 Permit Application

1.2.4 The permit application approved by this permit is signed and dated October 2013.

1.2.5 Engineering Documents

1.2.6 The engineering documents approved by this permit include, but are not limited to:


3. The Permit Reissuance Application Drawings dated October 1, 2013.


5. The Operation and Maintenance Plan dated October 1, 2013.


7. The Closure/Post Closure Care Plan dated October 1, 2013.


The hydrogeologic evaluation documents approved by this permit include:


6. Response from Permittee dated August 2014 to comments from the MPCA dated April 2014, regarding the hydrogeological portion of the permit application.


Any revised plans shall be submitted for approval by the Commissioner. The Permittee shall obtain approval from the Commissioner on all revised engineering plans prior to construction of the affected portion of the facility.

The Permittee may not locate, establish, or construct a solid waste management facility in areas designated in Minn. R. 7035.2555.
Design and Construction Criteria

1.3.3 Groundwater Quality, Surface Water Quality, Air Quality, and Soil Protection
1.3.4 The Permittee shall 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 shall design any proposed future expansions of the facility in accordance with this rule.

1.3.5 Storage Standards
1.3.6 The Permittee shall 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 Stormwater Management System
1.3.8 The Permittee shall construct the stormwater management system for the facility with best management practices (BMPs) to manage stormwater discharge in accordance with the National Pollutant Discharge Elimination System/State Disposal System (NPDES/SDS) Permit for the discharge of stormwater 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 Water Monitoring Systems
1.3.10 The Permittee shall design and install a water monitoring system in compliance with Minn. R. 7035.2815, subp. 10. A Work Plan for the installation of additional wells for the expansion into cell 5 shall be submitted to the MPCA for review and approval prior to beginning construction activities. Waste shall not be placed in cell 5 before completion and approval of baseline groundwater sampling of the additional wells.
1.3.11 The Permittee shall design any proposed future expansions or modifications of the water monitoring system in accordance with Minn. R. 7035.2815, subp. 10.

1.3.12 Construction Plan
1.3.13 The Permittee shall submit a construction plan to the Commissioner for approval prior to construction if the construction plan proposes any major revisions to the approved design.

1.3.14 Construction Notification
1.3.15 The Permittee shall 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.

1.3.16 Construction Certification
1.3.17 The Permittee shall 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.
Design and Construction Criteria

1.3.18 Alterations and Additions
1.3.19 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 Trained / Certified Operator
1.4.2 The Permittee shall 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 on duty at all times that the facility is open for the purpose of receiving waste.

1.4.3 Security
1.4.4 The Permittee shall prevent unauthorized entry onto the facility in accordance with Minn. R. 7035.2535, subp. 3. 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.

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

1.4.7 Operations Manual
1.4.8 The Permittee shall 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.

1.4.9 Roads
1.4.10 The Permittee shall 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 shall provide satisfactory storage for all solid waste accumulated at the facility in accordance with Minn. R. 7035.0700 and Minn. R. 7035.2855.

1.4.13 Nuisance Conditions
1.4.14 The Permittee shall manage the facility to be in compliance with Minn. R. 7011.0150 to prevent particulate matter from becoming airborne.
1.4.15 The Permittee shall manage all free liquids that have come in contact with solid waste so that the liquids are not discharged as stormwater.
Operating and Maintenance Criteria

1.4.16 Collection and Transportation of Solid Waste
1.4.17 The Permittee shall provide for the proper collection and transportation of solid waste in accordance with Minn. R. 7035.0800.

1.4.18 Unacceptable Wastes
1.4.19 The Permittee shall not accept the wastes identified in Minn. R. 7035.2535, subp. 1 for treatment, storage, processing, or disposal.

1.4.20 Industrial Solid Waste
1.4.21 The Permittee shall manage industrial solid waste for each waste activity as specified in the approved plan in accordance with Minn. R. 7035.2535, subp. 5. The Permittee shall include the information required by Minn. R. 7035.2575, subp. 2, items B and C in the annual report for each industrial waste accepted at the facility.

1.4.22 Stormwater Management System
1.4.23 The Permittee shall operate and maintain the stormwater management system for the facility with BMPs to manage stormwater discharges in accordance with the NPDES/SDS Permit for the discharge of stormwater associated with an industrial activity and/or a construction activity.

1.4.24 Groundwater Quality, Surface Water Quality, Air Quality, and Soil Protection
1.4.25 The Permittee shall operate and maintain 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.

1.4.26 Water Monitoring System
1.4.27 The Permittee shall maintain the integrity and functionality of the water monitoring network. The Permittee shall operate and maintain a water monitoring system in accordance with Minn. R. 7035.2815 subp. 10, and the approved plans and specifications.

1.4.28 Emergency Equipment
1.4.29 The Permittee shall provide and maintain adequate emergency equipment at the facility to control accidental fires, and make arrangements with the local fire protection agency to immediately acquire their services when needed. The Permittee shall also provide adequate communications equipment for emergency purposes.

1.4.30 Operating Record
1.4.31 The Permittee shall keep a written operating record at the facility in accordance with Minn. R. 7035.2575.

1.4.32 Self Inspections
1.4.33 The Permittee shall inspect the facility in accordance with the schedule and items approved by the Commissioner as defined by Minn. R. 7035.2535, subp. 4. The Permittee shall record inspections in an inspection log or summary and must keep these records for at least five years.
TOTAL FACILITY

Operating and Maintenance Criteria

1.4.34 Emergency Procedures Manual
1.4.35 The Permittee shall maintain a copy of the approved emergency procedures manual at the facility for facility personnel to use in time of emergency.

1.4.36 Contingency Action Plan
1.4.37 The Permittee shall maintain a copy of the approved contingency action plan at the facility.

1.4.38 Closure Plan
1.4.39 The Permittee shall 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, subp. 3.

1.4.40 Postclosure Plan
1.4.41 The Permittee shall maintain a copy of the approved postclosure care plan, and all subsequent amendments, until the postclosure care period begins. During the postclosure care period, the plan shall be kept by the contact person identified in Minn. R. 7035.2645, subp. 2, item C.

1.5 Monitoring Criteria

1.5.1 Compliance Boundary
1.5.2 The Permittee shall establish a compliance boundary in accordance with Minn. R. 7035.2815, subp. 4, items A-E. The compliance boundary is defined by figure 9 of the Sherco Unit 3 AQCS Solids Landfill Hydrogeologic Summary, August 2014. The compliance boundary shall be adjusted and placed no greater than 200 feet from the boundary of Cell 3 and Cell 4. In the future the compliance boundary shall be adjusted and placed no greater than 200 feet from the boundary of Cell 5 in addition to Cell 3 and Cell 4. A revised figure with the location of the revised compliance boundary shall be submitted upon approval of the replacement and installation of the additional monitoring wells for the expansion to Cell 5.

1.5.3 Sampling and Analysis
1.5.4 Groundwater, surface water, and leachate sampling and analysis must be conducted in accordance with Minn. R. 7035.2815, subp. 14, the approved Phase IV Sampling Plan, and the Limits Table(s) of this permit. Within 60 days of completion of baseline groundwater sampling for the new monitoring wells for the expansion to Cell 5, a revised Sampling and Analysis Plan shall be submitted to the MPCA.

1.5.5 Exceedence of an Intervention Limit
1.5.6 If an intervention limit established in this permit is exceeded, the Permittee shall take the actions listed in Minn. R. 7035.2815, subp. 4, item G and the Contingency Action Plan.
Monitoring Criteria

1.5.7 Monitoring Protocol
1.5.8 The Permittee shall develop and keep current a written monitoring protocol for the disposal area according to Minn. R. 7035.2815, subp. 14, item G and must ensure the protocol is followed during sampling and sample analysis.

1.5.9 Background Water Quality Monitoring
1.5.10 The Permittee shall 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.

1.5.11 Groundwater Performance Standards
1.5.12 The Permittee shall design, construct, operate, and maintain the facility 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, and Maximum Contaminate Level (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.

1.5.13 Hydrogeologic Evaluation
1.5.14 The Permittee has completed a hydrogeologic evaluation in accordance with Minn. R. 1700, item S and Minn. R. 7035.2815, subp. 3.

1.6 Reporting Criteria

1.6.1 Annual Facility Report
1.6.2 The Permittee shall submit an annual facility report for the preceding calendar year in accordance with Minn. R. 7035.2585 by February 1 of each year. When required of a waste activity, 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.

1.6.3 Electronic Data Reporting
1.6.4 The Permittee shall submit an electronic copy of all water quality monitoring data including groundwater, leachate and field data for each monitoring event. Electronic data must be submitted in the format outlined in the MPCA Solid Waste Program Electronic Laboratory Data Submittal Manual which can be found on the MPCA Solid Waste Permitting webpage at: http://www.pca.state.mn.us/waste/swpermits.html#data.

The schedule for submitting electronic copies of monitoring data shall follow the schedule outlined for monitoring reports as identified in the Required Actions and Submittals Table(s) of this permit.

1.6.5 The Permittee shall submit a paper copy of all water monitoring reports as outlined in the Required Actions and Submittals Table(s) of this permit unless otherwise specifically directed by the Commissioner.
Reporting Criteria

1.6.6 Monitoring Station Location Information
1.6.7 The Permittee shall collect location and elevation data for all monitoring points. Location data shall 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.

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

1.6.10 Routine Monitoring Reporting
1.6.11 The Permittee shall submit routine monitoring results to the commissioner by the dates specified in the Required Actions and Submittals Table(s) of this permit. The Permittee shall submit this data in both the electronic format and paper copy. The Permittee shall submit both the field data and the analytical data. The monitoring results shall 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.

1.6.12 Annual Monitoring Evaluations
1.6.13 The Permittee shall submit an annual water and leachate monitoring evaluation report in accordance with Minn. R. 7035.2585 and 7035.2815, subp. 14, item Q by February 1 of each year. 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.

1.7 Contingency Action Criteria

1.7.1 Contingency Action Plan
1.7.2 The Permittee shall address all facility waste activities as specified in the approved plans and specifications, and in accordance with Minn. R. 7035.2615.
1.7.3 If a fire occurs in the waste deposit area, the Permittee shall immediately implement its Contingency Action Plan to extinguish the fire.
Contingency Action Criteria

1.7.4 Within 24 hours of discovery of the fire, the Permittee shall provide notice to the MPCA that a fire has occurred and that the Contingency Action Plan has been implemented. If the Permittee has not extinguished the fire within two weeks of notice, the Permittee shall again notify the MPCA and shall provide the name of the professional engineer that their Permittee has hired to develop a revised plan for further fire fighting efforts. The Permittee shall submit the revised plan to the MPCA for review and approval within 15 days of the notice to the MPCA that a revised plan is being prepared. To be approved, their revised plan must identify the action that will be taken to extinguish that fire, including sources for materials and equipment and a timeline for implementation, and must be signed by a registered professional engineer. The Permittee shall implement the revised plan upon approval by the MPCA.

1.7.5 Contingency Action Procedures

1.7.6 The Permittee shall implement the actions necessary to comply with the Contingency Action Plan requirements in accordance with Minn. R. 7035.2615.

1.7.7 Emergency Preparedness and Prevention

1.7.8 The Permittee shall 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.

1.7.9 Emergency Procedures

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

1.8 Closure Criteria

1.8.1 Facility Closure

1.8.2 The Permittee shall close each waste activity, or the entire facility as appropriate, as specified in the approved plans and specifications, and in accordance with Minn. R. 7035.2625.

1.8.3 Closure Procedures

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

1.8.5 The Permittee shall 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.

1.9 Postclosure Criteria

1.9.1 Postclosure Plan

1.9.2 The Permittee shall comply with postclosure requirements as specified in the approved plans and specifications, and in accordance with Minn. R. 7035.2645.
Postclosure Criteria

1.9.3 Postclosure Care
1.9.4 The Permittee shall perform postclosure care for each waste activity as specified in the approved plans and specifications, and in accordance with Minn. R. 7035.2655, subp. 1.

1.9.5 Postclosure Use of Property
1.9.6 The Permittee shall comply with postclosure use of property requirements in accordance with Minn. R. 7035.2655, subp. 2.

1.10 Financial Criteria

1.10.1 Cost Estimates
1.10.2 The Permittee shall keep the current cost estimates for each waste activity at the facility during the operating life in accordance with Minn. R. 7035.2685, subp. 2.

1.11 General Conditions

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

1.11.3 Future Changes
1.11.4 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.

1.11.5 Rights and Privilege
1.11.6 The permit does not convey a property right or an exclusive privilege.

1.11.7 Enforcement
1.11.8 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.

1.11.9 Performance
1.11.10 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.
General Conditions

1.11.11 Operation and Maintenance

1.11.12 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.

1.11.13 Honesty

1.11.14 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.

1.11.15 Timely Information Submittal

1.11.16 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.

1.11.17 Access

1.11.18 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.

1.11.19 Discovery of Noncompliance

1.11.20 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.
General Conditions

1.11.21 Notification of Noncompliance Involving an Imminent Threat

1.11.22 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.

1.11.23 Reporting of Noncompliance

1.11.24 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.

1.11.25 Alterations

1.11.26 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.

1.11.27 Transferability

1.11.28 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.

1.11.29 Responsibility for Damage

1.11.30 The permit authorizes the Permittee to perform the activities described in the permit under the conditions of the permit. In issuing the permit, the state and MPCA assume no responsibility for damage to persons, property, or the environment caused by the activities of the Permittee in the conduct of its actions, including those activities authorized, directed, or undertaken under the permit. To the extent the state and MPCA may be liable for the activities of its employees, that liability is explicitly limited to that provided in the Tort Claims Act, Minn. Stat. 3.736.

1.11.31 Modifying or Revoking Permit

1.11.32 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.

1.11.33 Severability

1.11.34 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.
General Conditions

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

1.11.37 Term of Permit
1.11.38 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.

1.11.39 Retention of Records
1.11.40 The Permittee shall maintain records of all groundwater monitoring data and groundwater surface elevations for the active life of the facility and each waste activity and, for disposal activities, for the postclosure care period. The Permittee shall also maintain an operating record in accordance with Minn. R. 7035.2575 until closure of each waste activity at the facility.

1.11.41 As-built Plans
1.11.42 The Permittee shall 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 Permittee and by an engineer registered in Minnesota certifying that the facility or modified portion of the facility has been constructed in compliance with the conditions of the permit.

1.11.43 Construction Certification
1.11.44 The Permittee shall 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 Permittee with a letter stating that the certification submitted is complete and approved.

1.11.45 Financial Assurance
1.11.46 The Permittee shall 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.
2. INDUSTRIAL WASTE DISPOSAL AREA       IL 001

2.1 Design and Construction Criteria

2.1.1 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.

2.1.2 Design Requirements

2.1.3 The Permittee must design and construct the disposal area in accordance with the permit and Minn. R. 7035.1590 to 7035.2500.

2.1.4 The Permittee must design any proposed future expansions or modifications of the disposal area in accordance with the design requirements as specified in the approved plans.

2.1.5 Prohibited Areas

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

2.1.7 Permit Application and Required Plans

2.1.8 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.

2.1.9 Location of Disposal Area

2.1.10 The disposal area must be located in accordance with Minn. R. 7035.2555 and Minn. R. 7035.2815, subp. 2.

2.1.11 Cover System Design Requirements

2.1.12 The Permittee must maintain a cover system in accordance with Minn. R. 7035.2815, subp. 6, item D and E.

2.1.13 Cover and Liner Materials Evaluation

2.1.14 The Permittee must evaluate any soils intended for use as cover or liner material in accordance with Minn. R. 7035.2815, subp. 8.

2.1.15 This permit approves a modified HDPE/GCL liner system for Cells 4 and 5 allowing the Permittee to reduce the thickness of the drainage layer from two (2) feet to one (1) foot. Upon placement of the 1 foot drainage layer the Permittee shall perform a Geomembrane Leak Location Survey. The Permittee shall repair all known damage to the liner prior to certification of construction.

2.1.16 Leachate Detection, Collection, and Treatment System

2.1.17 The Permittee must design any future expansions or modifications of the waste disposal area to include a leachate detection, collection, and on-site or off-site treatment system in accordance with Minn. R. 7035.2815, subp. 9.

2.2 Operating and Maintenance Criteria

2.2.1 Surface Water Drainage

2.2.2 The Permittee must divert surface water drainage around and away from the site operating area. Slopes greater than 200 feet must include drainage ways and design features to prevent erosion.
Operating and Maintenance Criteria

2.2.3 Run-on / Run-off Control System
2.2.4 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 at least the water volume resulting from a 24 hour, 25 year storm.

2.2.5 Screening
2.2.6 The Permittee must screen the disposal area either by existing or provided means.

2.2.7 Unacceptable Wastes
2.2.8 The Permittee must not accept the following wastes for disposal except as approved by the Commissioner: 1) liquids; 2) infectious waste; 3) raw animal manure; 4) septic tank pumpings; 5) any of the following: digested sewage sludges, lime sludges, grit chamber cleanings, bar screenings, and other sludges; and 6) other substances that may be deemed unacceptable by the MPCA.

2.2.9 Frost Protection
2.2.10 The Permittee must place at least three feet of solid waste, or an MPCA approved alternative insulating material, on any newly constructed liner by December 31 of each year. If an alternative insulating material is utilized, the Permittee must install thermo couples in the newly lined area, and must maintain the approved thickness of insulating material until three feet of solid waste has been placed on the liner. No disposal may take place on uncovered areas after December 31 without testing the liner integrity and obtaining written approval from the Commissioner.

No cover material is required for frost protection for the HDPE/GCL composite liner system.

2.2.11 Phase Development
2.2.12 The Permittee must develop the site in phases according to the phase development plans. Each phase must contain individual cells that will provide for filling in a manner to achieve final waste elevations as rapidly as possible.

2.2.13 Staking of Fill Phases
2.2.14 The Permittee must identify each fill phase with grade stakes or other marking method before the deposition of any waste.

2.2.15 Working Face
2.2.16 The Permittee must limit the disposal of industrial solid waste to as small an area as practical and with appropriate facilities to confine wind-blown material within the area.

2.2.17 Compaction
2.2.18 The Permittee must compact the industrial solid waste as densely as practicable in layers two feet or less in depth and using a maximum three-to-one slope to achieve maximum compaction.
Operating and Maintenance Criteria

2.2.19 Cover Material Stockpile

2.2.20 The Permittee must maintain an adequate supply of cover material which, if necessary, must be stockpiled and protected to allow for compliance with the requirements contained in Minn. R. 7035.1700, item D. The cover material must be available for use during inclement weather or winter operations.

2.2.21 Intermittent Cover

2.2.22 The Permittee must cover the industrial solid waste with a minimum six (6) inches of suitable compacted intermittent cover material at the end of each day of operation, or as approved by the Commissioner. The Permittee must maintain all previously filled areas with at least six inches of suitable cover material.

As an alternative to the intermittent cover described above, this permit also allows for the Cementitious crust of CCR to be qualified as intermittent cover in lieu of six (6) inches of soil cover.

2.2.23 Intermediate Cover

2.2.24 The Permittee must provide and maintain an intermediate cover totaling at least twelve (12) inches of suitable compacted cover material for those disposal areas that will be exposed to the elements for a period of 120 days or longer.

As an alternative to the intermediate cover described above, this permit also allows for the Cementitious crust of CCR to be qualified as intermediate cover in lieu of twelve (12) inches of soil cover only on interior slopes. If disposal areas on any exterior slopes will be exposed to the elements for a period of 120 days or longer, an intermediate cover totaling at least twelve (12) inches of compacted, suitable cover material must be provided and maintained.
Operating and Maintenance Criteria

2.2.25 (Continued) Intermediate cover must be placed in areas where waste will not be placed within 120 days. Intermediate cover must consist of twelve (12) inches or more of compacted soils or ash. Soil shall be the preferred cover material and ash shall only be used in situations where the use of a soil cover is not practicable because it will easily erode due to the steepness or the use of the slope. When ash is used for intermediate cover material, the ash shall be applied consistent with the approved operational plan included in the permit application for this facility. In using the ash in this manner, the Permittee shall meet the following conditions:
1. All water contacting the ash shall be treated as leachate,
2. Use and deploy the ash cover for frost protection in such a way as to not pose a threat to facility workers,
3. Erosion occurring in the areas where ash is employed as intermediate cover shall be corrected as soon as practicable,
3. The ash shall not be stockpiled or used in such a way as to generate water releases to surface water or groundwater,
4. If dusting becomes a problem at the site, corrective action must be taken or ash use must be discontinued; and
5. Hauling of ash for disposal shall only occur on designated haul routes so as to the maximum practicable extent minimize emissions. The Permittee shall employ the use of water or other dust suppressants on the haul routes as necessary to meet this condition.

2.2.26 (Continued) The MPCA reserves the right to withdraw approval to use ash as intermediate cover should any operational, environmental or health issues occur regarding the use of this material in this manner.

2.2.27 Final Cover

2.2.28 The Permittee must begin closure of each fill phase within 30 days after reaching final permitted elevations. Each fill phase, upon reaching final permitted elevations, must be covered in accordance with the approved plans and specifications.

2.2.29 The Permittee must maintain the final cover system on all closed portions of the active waste disposal area in accordance with the approved plans and specifications.

2.2.30 Stormwater Management

2.2.31 The Permittee must operate and maintain the storm water management system for the disposal area with BMPs to manage stormwater discharges in accordance with the NPDES Permit for the discharge of stormwater associated with an industrial and/or construction activity.
Operating and Maintenance Criteria

2.2.32 Leachate System

2.2.33 The Permittee must maintain the integrity and functionality of the leachate detection, collection and treatment system. The Permittee must also operate and maintain the leachate detection, collection and on-site or off-site treatment system in accordance with the approved plans and specifications.

All leachate collection pipes from active uncapped areas of the Facility, must be cleaned on an annual basis or as otherwise approved by the Commissioner as per an approved leachate collection pipe cleaning schedule. Documentation of this maintenance must be recorded in the operating record in accordance with Minn. R. 7035.2575.

The Permittee must maintain one foot of leachate head on the liner system.

2.3 Monitoring Criteria

2.3.1 Leachate Quality Sampling and Analysis

2.3.2 The Permittee shall conduct leachate quality sampling and analysis as specified in the approved plans and specifications, and in accordance with Minn. R. 7035.2815 subp. 14 and must include the monitoring stations identified in the Limits Table(s) of this permit. The Permittee shall conduct the sampling according to the schedule shown in the Limits Table(s) of this permit.

2.4 Financial Criteria

2.4.1 Financial Assurance

2.4.2 The Permittee shall establish and maintain financial assurance in accordance with Minn. R. 7035.2665 to 7035.2805.

Based on the December 5, 2003 Program Management Memo, the Permittee may self-insure the costs associated with Closure, post-Closure, and the Contingency Action Plan.

2.4.3 The Permittee must keep the current cost estimates for each waste activity at the facility during the operating life in accordance with Minn. R. 7035.2685, subp. 2.

2.5 Specific Conditions

2.5.1 Specific Conditions

2.5.2 If snow removal is necessary within the working area, the snow must be stockpiled within the lined area.

2.5.3 The Permittee shall meet the noise standards and requirements in Minn. R. 7030. If the Permittee or the MPCA receives complaints regarding noise at the facility, the Permittee shall implement a noise monitoring program at the facility to evaluate compliance with Minn. R. 7030. If the Permittee is not in compliance with Minn. R. 7030, the Permittee must implement measures to reduce the noise level at the facility in compliance with Minnesota Rules.
Specific Conditions

2.5.4 Unless otherwise required by the Commissioner, or unless access to the property is denied by the owner, the Permittee agrees to annually sample and analyze the well water at the property owned, at the time of issuance of this permit, by Lonny & Fran Seeley, P.O. Box 73, Becker, Minnesota 55307.
## Limits Table

**Report Date:** 06/12/2015  
**Facility:** Sherco Unit 3 AQCS Solids Landfill  
**Permit:** SW-293  

### Standard Landfill Monitoring Periods:
- **Spring:** Mar-28 to Apr-28
- **Summer:** Jul-01 to Aug-07
- **Fall:** Oct-14 to Nov-14

This Limits Table applies to the following stations:
- Leachate

<table>
<thead>
<tr>
<th>Analyte</th>
<th>CAS/EMMI#</th>
<th>Intervention Limit</th>
<th>Units</th>
<th>Frequency</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alkalinity, Total as CaCO3</td>
<td>T-0-05</td>
<td>-</td>
<td>mg/L</td>
<td>Spring, Summer and Fall</td>
<td></td>
</tr>
<tr>
<td>Aluminum</td>
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<td>mg/L</td>
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</tr>
<tr>
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<td></td>
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<tr>
<td>Appearance</td>
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<td>Spring, Summer and Fall</td>
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</tr>
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<td></td>
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<td>-</td>
<td>%</td>
<td>Spring, Summer and Fall</td>
<td></td>
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<tr>
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<td>-</td>
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<td>SU</td>
<td>Spring, Summer and Fall  Field and Laboratory</td>
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<tr>
<td>Sulfate</td>
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<td>mg/L</td>
<td>Spring, Summer and Fall</td>
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</tbody>
</table>
**LIMITS TABLE**

Report Date: 06/12/2015
Facility: Sherco Unit 3 AQCS Solids Landfill
Permit: SW-293

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Leachate

<table>
<thead>
<tr>
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<th>CAS/EMMI#</th>
<th>Intervention Limit</th>
<th>Units</th>
<th>Frequency</th>
<th>Comments</th>
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<td>Tin</td>
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<td>-</td>
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</table>
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<tr>
<td>Alkalinity, Total as CaCO3</td>
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<td>Spring, Summer and Fall</td>
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<td>Summer</td>
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<td>mg/L</td>
<td>Summer</td>
<td>Unionized and total</td>
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<td>Summer</td>
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<td>-</td>
<td>%</td>
<td>Summer</td>
<td>Report charge balance in annual report</td>
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<td>mg/L</td>
<td>Spring, Summer and Fall</td>
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</tr>
<tr>
<td>Chromium</td>
<td>744-04-73</td>
<td>25.0</td>
<td>ug/L</td>
<td>Summer</td>
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</tr>
<tr>
<td>Copper</td>
<td>744-05-08</td>
<td>-</td>
<td>ug/L</td>
<td>Summer</td>
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</tr>
<tr>
<td>Dissolved Oxygen, Field</td>
<td>T-1-05</td>
<td>-</td>
<td>mg/L</td>
<td>Spring, Summer and Fall</td>
<td>Field</td>
</tr>
<tr>
<td>Dissolved Solids, Total</td>
<td>C-0-10</td>
<td>-</td>
<td>mg/L</td>
<td>Spring, Summer and Fall</td>
<td></td>
</tr>
<tr>
<td>Eh (Oxidation potential)</td>
<td>4</td>
<td>-</td>
<td>mV</td>
<td>Spring, Summer and Fall</td>
<td></td>
</tr>
<tr>
<td>Hardness, Carbonate</td>
<td>PCA-01-4</td>
<td>-</td>
<td>mg/L</td>
<td>Summer</td>
<td></td>
</tr>
<tr>
<td>Iron</td>
<td>743-98-96</td>
<td>-</td>
<td>ug/L</td>
<td>Summer</td>
<td></td>
</tr>
<tr>
<td>Lead</td>
<td>743-99-21</td>
<td>-</td>
<td>ug/L</td>
<td>Summer</td>
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<tr>
<td>Magnesium</td>
<td>743-99-54</td>
<td>-</td>
<td>ug/L</td>
<td>Summer</td>
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<tr>
<td>Manganese</td>
<td>743-99-65</td>
<td>25.0</td>
<td>ug/L</td>
<td>Summer</td>
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<tr>
<td>Mercury</td>
<td>743-99-76</td>
<td>0.5</td>
<td>ug/L</td>
<td>Summer</td>
<td></td>
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<tr>
<td>Molybdenum</td>
<td>743-99-87</td>
<td>-</td>
<td>ug/L</td>
<td>Spring, Summer and Fall</td>
<td></td>
</tr>
<tr>
<td>Nitrate + Nitrite</td>
<td>C-0-05</td>
<td>2,500.0</td>
<td>ug/L</td>
<td>Spring, Summer and Fall</td>
<td>Field and Laboratory</td>
</tr>
<tr>
<td>pH</td>
<td>C-0-06</td>
<td>-</td>
<td>SU</td>
<td>Spring, Summer and Fall</td>
<td>Field and Laboratory</td>
</tr>
<tr>
<td>Phosphorus</td>
<td>772-31-40</td>
<td>-</td>
<td>mg/L</td>
<td>Summer</td>
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<tr>
<td>Potassium</td>
<td>744-00-97</td>
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<td>ug/L</td>
<td>Summer</td>
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<tr>
<td>Selenium</td>
<td>778-24-92</td>
<td>7.5</td>
<td>ug/L</td>
<td>Spring, Summer and Fall</td>
<td></td>
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<tr>
<td>Sodium</td>
<td>744-02-35</td>
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<td>ug/L</td>
<td>Summer</td>
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<tr>
<td>Specific Conductance</td>
<td>C-0-11</td>
<td>-</td>
<td>umho/cm</td>
<td>Spring, Summer and Fall</td>
<td>Field and Laboratory</td>
</tr>
</tbody>
</table>
### Limits Table

**Report Date:** 06/12/2015  
**Facility:** Sherco Unit 3 AQCS Solids Landfill  
**Permit:** SW-293

This Limits Table applies to the following stations: P-117, P-120, P-125, P-134, P-137A, P-137B, P-138A, P-138B, P-139, P-73A-1, P-73B-1, P-74-1, P-75-1, P-76A-1, P-76B-1, P-97, P-98, P-99

<table>
<thead>
<tr>
<th>Analyte</th>
<th>CAS/EMMI#</th>
<th>Intervention Limit</th>
<th>Units</th>
<th>Frequency</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Static Water Level (Elevation, MSL)</td>
<td>PCA-00-1</td>
<td>-</td>
<td>ft</td>
<td>Spring, Summer and Fall</td>
<td></td>
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<tr>
<td>Sulfate</td>
<td>148-08-798</td>
<td>-</td>
<td>mg/L</td>
<td>Spring, Summer and Fall</td>
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<tr>
<td>Suspended Solids, Total</td>
<td>C-0-09</td>
<td>-</td>
<td>mg/L</td>
<td>Spring, Summer and Fall</td>
<td></td>
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<tr>
<td>Temperature</td>
<td>T-1-21</td>
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<td>Deg C</td>
<td>Spring, Summer and Fall</td>
<td>Field</td>
</tr>
<tr>
<td>Vanadium</td>
<td>744-06-22</td>
<td>12.5</td>
<td>ug/L</td>
<td>Summer</td>
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<tr>
<td>Zinc</td>
<td>744-06-66</td>
<td>500.0</td>
<td>ug/L</td>
<td>Summer</td>
<td></td>
</tr>
</tbody>
</table>

**Standard Landfill Monitoring Periods:**
- **Spring:** Mar-28 to Apr-28
- **Summer:** Jul-01 to Aug-07
- **Fall:** Oct-14 to Nov-14
### LIMITS TABLE

**Report Date:** 06/12/2015  
**Facility:** Sherco Unit 3 AQCS Solids Landfill  
**Permit:** SW-293

**Standard Landfill Monitoring Periods:**
- **Spring:** Mar-28 to Apr-28  
- **Summer:** Jul-01 to Aug-07  
- **Fall:** Oct-14 to Nov-14

---

This Limits Table applies to the following stations:
P-119, P-122, P-135

<table>
<thead>
<tr>
<th>Analyte</th>
<th>CAS/EMMI#</th>
<th>Intervention Limit</th>
<th>Units</th>
<th>Frequency</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Static Water Level (Elevation, MSL)</td>
<td>PCA-00-1</td>
<td>-</td>
<td>ft</td>
<td>Spring, Summer and Fall</td>
<td></td>
</tr>
<tr>
<td>Frequency/Due Date</td>
<td>Action or Submittal</td>
<td>Requirement</td>
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<tr>
<td>-------------------</td>
<td>--------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annually</td>
<td>Submit Annual Facility Report</td>
<td>The Permittee shall submit an annual facility report for the preceding calendar year in accordance with Minn. R. 7035.2585 by February 1 of each year. When required of a waste activity, 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.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annually</td>
<td>Submit Summer Water Monitoring Report</td>
<td>A summer water monitoring report must be submitted by September 30 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. Additionally, the results of the summer leachate sampling shall be submitted by September 30 of each year. The groundwater and leachate sampling results shall be submitted in both electronic format and paper copy.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annually</td>
<td>Submit Spring Water Monitoring Report</td>
<td>A spring water monitoring report must be submitted by June 30 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. Additionally, the results of the spring and previous winter’s leachate sampling shall be submitted by June 30 of each year. The groundwater and leachate sampling results shall be submitted in both the electronic format and paper copy.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annually</td>
<td>Submit Annual Water Monitoring Evaluation Report</td>
<td>The Permittee shall submit an annual water and leachate monitoring evaluation report in accordance with Minn. R. 7035.2585 and 7035.2815, subp. 14, item Q by February 1 of each year. 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.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annually</td>
<td>Submit Autumn Water Monitoring Report</td>
<td>An autumn water monitoring report must be submitted 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. Additionally, the results of the fall leachate sampling shall be submitted by February 1 of each year. The groundwater and leachate sampling results shall be submitted in both electronic format and paper copy.</td>
<td></td>
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</tr>
</tbody>
</table>
# Waste Capacity Table

**Report Date:** 06/12/2015  
**Facility:** Sherco Unit 3 AQCS Solids Landfill  
**Permit:** SW-293  
**Action:** PER009

<table>
<thead>
<tr>
<th>WA ID</th>
<th>Waste Activity Type</th>
<th>Status</th>
<th>Permitted Area</th>
<th>Permitted Capacity</th>
<th>Design Capacity</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>IL001</td>
<td>Industrial Waste Disposal Area</td>
<td>Open</td>
<td>144.88 acres</td>
<td>14,593,669.00 cubic yards</td>
<td>27,063,331.00 cubic yards</td>
<td>The ultimate waste capacity and permitted capacity are defined by permit approved construction and may increase as new construction is approved by the Commissioner.</td>
</tr>
</tbody>
</table>

**Permit Issued:**  
**Permit Expires:** April 8, 2014