

**STATE OF MINNESOTA**  
**DEPARTMENT OF NATURAL RESOURCES**  
**PRELIMINARY DRAFT RULES**

**61XX**

**Silica Sand Mine Reclamation**

Draft 03/03/2015

***PURPOSE OF THIS DOCUMENT:*** *This document contains preliminary draft language related to silica sand mine reclamation rules. The formation of draft rules is and continues to be an iterative process and language in this document may change.*

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# 1 GENERAL PROVISIONS

## 2 61XX.0010 DEFINITIONS.

3 Subpart 1. **Scope.** The terms used in parts 61XX.0020 to 61XX.0430 have the following meanings:

4 Subp. 2. **Above grade pond.** “Above grade pond” means any water body used in the processing of  
5 silica sand where the top of the constructed embankment is greater than six feet above the outside  
6 ground surface of the water body.

7 Subp 3. **Air blast.** “Air blast” means the airborne shock wave or acoustic transient wave generated  
8 by an explosive.

9 Subp 4. **Borrow site.** “Borrow site” means a temporary mine associated with a specific road  
10 construction or transportation-related project.

11 Subp. 5. **Contingency reclamation.** “Contingency reclamation” means the reclamation of a mine  
12 that meets 61XX.0010 through 61XX.0430 after an unexpected shutdown of operations.

13 Subp. 6. **Corrective actions.** “Corrective actions” means measures specified by the regulatory  
14 authority to an operator to mitigate violations of an approved reclamation plan.

15 Subp. 7. **Existing mining project.** “Existing mining project” means any mine area recognized by the  
16 local zoning authority as a legal nonconforming land use for mining operations or a mine area where  
17 the operator possesses a valid permit by a regulatory authority issued before the date of adoption of  
18 chapter 61XX.

19 Subp. 8. **Financial assurance.** “Financial assurance” means a commitment of funds or resources by  
20 an operator to a regulatory authority that satisfies the requirements in 61XX.0220 and sufficient to pay  
21 for corrective actions and reclamation activities required by this chapter.

22 Subp. 9. **Highwall.** “Highwall” means a vertical or nearly vertical face in bedrock or a slope of  
23 consolidated or unconsolidated material that is steeper than 3:1 horizontal to vertical.

24 Subp. 10. **Intermittent mining.** “Intermittent mining” means mining with expected periods of  
25 inactivity greater than nine months, with the intent to resume mining at a future date.

26 Subp. 11. **Mine area.** “Mine area” means contiguous or adjacent lands, under control of the same  
27 person, used in connection with mining. Mine area includes the lands used in combination with mining  
28 on which:

29 (1) earthen material is deposited;

- 30 (2) silica sand facilities are located;  
31 (3) water bodies used in the mining process are located; and  
32 (4) auxiliary lands that are used or intended to be used in a particular mining operation are  
33 located.

34 Mine area excludes access roads outside of the mine area or lands that have been release from  
35 financial assurance under [61XX.0420](#).

36 Subp. 12. **Mine waste.** “Mine waste” means silica sand that remains after processing or earthen  
37 material displaced by mining.

38 Subp. 13. **Mining.** “Mining” means all or part of the process involved in extracting silica sand for the  
39 sale or use by the operator. Mining includes use of mining equipment or techniques to remove  
40 materials from silica-rich sandstones, including drilling and blasting, as well as associated activities such  
41 as excavation, grading, and dredging. Mining does not include removal of earthen materials that  
42 contain minimal or incidental amounts of silica sand.

43 Subp. 14. **New mining project.** “New mining project” means any mine area that meets the  
44 following criteria:

- 45 (1) proposed mine area requiring a first-time permit to mine silica sand by a regulatory  
46 authority;  
47 (2) existing mine area requiring a new or amended permit to expand beyond the permitted  
48 boundary;  
49 (3) existing mine area requiring a new or amended permit to increase their permitted  
50 production rate greater than 25%; or  
51 (4) existing mine area requiring a new or amended permit to change the geologic material  
52 being excavated to silica sand.

53 Subp. 15. **Operator.** “Operator” means any person who is engaged in, or has applied for an  
54 approval of a reclamation plan for silica sand mining, whether individually, jointly or through  
55 subsidiaries, agents, employees, contractors or subcontractors.

56 Subp. 16. **Overburden.** “Overburden” means earthen material that is displaced during mining  
57 excluding topsoil and subsoil.

58 Subp. 17. **Person.** “Person” means an individual, owner, operator, firm, partnership, corporation,  
59 joint venture, or other legal entity.

60 Subp. 18. **Phased reclamation.** “Phased reclamation” means the sequential or progressive  
61 reclamation of portions of the mine area in advance of final site reclamation. Phased reclamation may

62 or may not be final reclamation, but is performed to minimize the area exposed to erosion at any one  
63 time by mining activities.

64 Subp. 19. **Qualified Professional.** “Qualified professional” means a person who is registered and  
65 licensed as provided by Minnesota Statutes, chapter 326.

66 Subp. 20. **Reclamation.** “Reclamation” means the rehabilitation of a mine area that achieves a land  
67 use specified in an approved reclamation plan identified in 61XX.0100 to 61XX.0260.

68 Subp. 21. **Regulatory authority.** “Regulatory authority” means the governmental unit responsible  
69 for approving the permit to mine for a new mine area within their jurisdiction and includes the  
70 Department of Natural Resources, as provided by Minnesota Statutes 103G.217.

71 Subp. 22. **Self-sustaining.** “Self-sustaining” means the ability to maintain and self-renew without  
72 intervention.

73 Subp. 23. **Silica sand.** “Silica sand” means an earthen material derived from silica-rich sandstones.

74 Subp. 24. **Silica-rich sandstone.** “Silica-rich sandstone” means an earthen material consisting of  
75 quartzose sedimentary rock of mostly sand-sized particles. Quartzose is a physical characteristic of a  
76 sedimentary rock formation where greater than 90% of the constituent rock particles consist of pure  
77 quartz. Examples of silica-rich sandstones include formally recognized and described sandstones  
78 defined in Paleozoic Stratigraphic Nomenclature for Minnesota, Minnesota Geologic Survey, Report of  
79 Investigation 65 (2008).

80 Subp. 25. **Silica sand facility.** “Silica sand facility” means any facility that:

- 81 (1) operates silica sand processing equipment;  
82 (2) operates equipment used for transloading silica sand;  
83 (3) establishes and maintains an open or covered storage pile of silica sand; or  
84 (4) operates a silica sand storage system.

85 Subp. 26. **Subsoil.** “Subsoil” means the layer or stratum of earthen material immediately under the  
86 topsoil. Like topsoil it is composed of variable amounts of silt, sand, or clay, but lacks the organic  
87 matter and humus content of topsoil. Subsoil is equivalent to the B horizon of a soil profile.

88 Subp. 27. **Topsoil.** “Topsoil” means the upper most portion of a soil where soil organic matter is  
89 mixed with mineral material and is more fertile than underlying soil layers. Topsoil is equivalent to the  
90 A horizon of a soil profile.

91 **61XX.0020 PURPOSE.**

92 The process of reclamation begins with planning for a new mining project, continues through mine  
93 operation, and concludes when the criteria for reclamation at the cessation of a mine area have been  
94 met. The purpose of parts **61XX.0010** to **61XX.0430** is to require reclamation of mine areas in order to:

- 95 A. control the possible adverse environmental effects of silica sand mining and to conserve natural  
96 resources;
- 97 B. ensure the usefulness, productivity, and scenic values of all lands and waters involved in silica  
98 sand mining within the state, that these lands will receive the protection and reclamation to the  
99 greatest extent practicable at the earliest opportunity following silica sand mining;
- 100 C. provide for the greatest practicable degree of statewide consistency in the reclamation of silica  
101 sand mining; and
- 102 D. ensure that reclamation is consistent with local land use plans.

103 This chapter establishes standards for the reclamation of mine areas, sets out requirements for  
104 reclamation plans, defines standards for blasting, defines procedures and requirements applicable to  
105 mines subject to parts **61XX.0010** to **61XX.0430**, and defines procedures for administering silica sand  
106 reclamation plans, including the exercise of regulating authorities for inspections. These rules are  
107 promulgated under Laws 2013, chapter 114, article 4, section 105(b).

108 **61XX.0030 SCOPE.**

109 Subpart 1. **Approval.** No person may engage in silica sand mining or silica sand mining reclamation  
110 before receiving approval for a reclamation plan from the regulatory authority, unless the activity is  
111 exempted in **subpart 5**.

112 Subp. 2. **Applicability.** Parts **61XX.0010** to **61XX.0430** apply as indicated in items A through D.

- 113 A. Nothing in these parts waive the requirements of federal, state, and local regulations  
114 governing environmental regulations, public health, safety and welfare.
- 115 B. All new mining projects proposed after the adoption date of this rule, unless the activity is  
116 exempted in **subpart 5**.
- 117 C. The rules do not apply to mine areas where mining has permanently ceased before  
118 enactment of this rule.
- 119 D. Financial assurance requirements of **61XX.0220** do not apply to silica sand mining  
120 conducted on behalf of the state, a state agency, board, commission, department, or local  
121 government.

122 Subp. 3. **Joint applications.** When two or more operators are or will be engaged in silica sand  
123 mining, all persons shall join in the application, and the approved reclamation plan must be issued  
124 jointly.

125 Subp. 4. **Duration of reclamation plan approval.** The reclamation plan approved under parts  
126 61XX.0010 to 61XX.0430 must last through the mine's operation and final reclamation. To maintain a  
127 plan's approved status, the operator must fulfill the annual reporting requirements under 61XX.0240. If  
128 changes occur within the mine area, the nature of planned reclamation, or other aspects of mining  
129 required by the approved reclamation plan, the operator shall apply for a modification of the  
130 reclamation plan under 61XX.0350.

131 Subp. 5. **Exempt activities.** Parts 61XX.0010 to 61XX.0430 do not apply to any of the following  
132 activities:

- 133 A. excavations or grading of silica sand under one acre by a person solely for domestic or farm  
134 use at that person's residence or farm;
- 135 B. excavation or grading of silica sand conducted for the construction, reconstruction,  
136 maintenance or repair of a public highway, railroad, airport facility, or any other  
137 transportation facility where the excavation or grading is entirely within the property  
138 boundaries of the transportation facility;
- 139 C. excavation or grading of silica sand conducted for preparing a construction site or restoring  
140 land following a flood or natural disaster;
- 141 D. dredging for navigational purposes;
- 142 E. constructing or maintaining drainage ditches;
- 143 F. remediation of environmental contamination and the disposal of spoils from these  
144 activities; and
- 145 G. excavation of a borrow site that will be opened and reclaimed within 36 months where the  
146 reclamation of the borrow site is specified under contract with a regulatory authority or the  
147 Minnesota Department of Transportation.

## 148 STANDARDS

### 149 61XX.0100 PERFORMANCE STANDARDS.

150 Subpart 1. **Environmental regulations, public health, safety and welfare.** Reclamation must be  
151 conducted and completed in a manner that assures compliance governing public health, safety and  
152 welfare.

153 Subp. 2. **Water Quality and Quantity.** Reclamation must be conducted and completed in a manner  
154 that assures compliance with applicable water quality and quantity standards.

155 Subp. 3. **Area disturbed and phased reclamation.** Reclamation must be conducted, to the extent  
156 practicable,

157 (1) to minimize the area disturbed by mining; and

158 (2) to phase new disturbances with the reclamation of depleted or unused portions of the mine  
159 area.

160 Subp. 4. **Final Topography.** Unless specified by the final approved reclamation plan, the topography  
161 of reclaimed mine areas must comprise sinuous contours, rolling mounds and hills, and blend with  
162 adjacent topography to a reasonable extent. Straight planar slopes and right angles must be avoided. If  
163 the mine area intersects the Decorah Formation, topography restoration must provide for the creation  
164 of perched, vegetated, wetlands if they were present within the mine area prior to mining.

165 Subp. 5. **Stormwater runoff.** The mine area must be designed and graded to produce post-  
166 development hydrology that does not exceed predevelopment runoff rates and volumes to  
167 surrounding properties. Runoff related to the complete range of rainfall frequencies, up to and  
168 including a 100-year storm event, must be managed within the mine area.

169 Subp. 6. **Revegetation and site stabilization.** Except for permanent roads or similar surfaces, or  
170 areas otherwise approved for continued use as identified in the reclamation plan, all land surfaces  
171 affected by mining must be reclaimed and stabilized with vegetation or other means compatible with  
172 local land use plans and noxious weed laws. Revegetation and site stabilization must be in accordance  
173 with the approved reclamation plan and must be performed as soon as practicable after mining has  
174 permanently ceased in any part of the mine area. All seed and plant materials shall be certified noxious  
175 weed-free.

176 Subp. 7. **Ecological rehabilitation.** When the specified land use proposed by the approved  
177 reclamation plan requires ecological or habitat rehabilitation, it must be reclaimed, to the extent  
178 practicable, to an ecologically self-sustaining condition as outlined by the individual reclamation plan.  
179 The use of a state approved seed mix and native species from an appropriate Minnesota biome should  
180 be used whenever possible.

181 Subp. 8. **Invasive species.** The spread of non-native invasive species must be controlled within the  
182 mine area. Prior to moving equipment out of the mine area, the equipment must be cleaned and free



183 from non-native invasive species to the extent practicable. If possible, cut wood must remain on-site.  
184 The transportation of cut wood out of the mine area must follow state and federal quarantine laws.

185 Subp. 9. **Mine waste.** Mine waste must be used in accordance with the approved reclamation plan.  
186 Other solid or hazardous wastes must be disposed of in accordance with applicable rules.

187 Subp. 10. **Blasting.** Blasting must be conducted in a manner that prevents injury to persons,  
188 damage to public or private property outside of the mine area, mitigates adverse impacts on any  
189 underground mine, and mitigates changes in the availability of surface or groundwater outside the  
190 mine area.

191 **61XX.0110 TOPSOIL AND OVERBURDEN MANAGEMENT.**

192 Subp. 1. **Volume.** The operator shall obtain the volume of soil required to perform final reclamation  
193 by removal of on-site topsoil or topsoil substitute material or by obtaining topsoil or substitute  
194 material as needed to make up the volume of topsoil as specified in the reclamation plan.

195 Subp 2. **Removal.**

- 196 A. Topsoil and subsoil must be immediately used to reclaim newly disturbed portions of the mine  
197 area or stockpiled on site for use in future reclamation.
- 198 B. Topsoil must be carefully removed where mining activities destroy existing vegetation and  
199 cause erosion within the mine area. Handling of topsoil during wet conditions must be avoided.
- 200 C. Topsoil must be separated from subsoil and overburden to the extent practicable.
- 201 D. No topsoil must be sold or permanently removed from the mine area unless approved within  
202 the reclamation plan.

203 Subp. 2. **Storage requirements.**

- 204 A. Topsoil must be stored in separate piles from overburden and when possible stored separately  
205 from subsoil. Piles must be labeled by material type.
- 206 B. Stockpiled material must be placed on a stable site within the mine area. The site must be  
207 chosen to protect the material from compaction, erosion, further disturbance, and  
208 contamination.
- 209 C. For long-term storage, stockpiled material must be protected from wind and water erosion  
210 through prompt establishment and maintenance of an effect, quick growing vegetative cover or  
211 through other measures approved by the regulatory authority.

212 D. Composting chipped wood and vegetative debris with topsoil is encouraged. Compost piles  
213 must be regularly turned and maintained.

214 Subp. 3. **Substitution.** If the topsoil retained from the mine area is insufficient in terms of quantity  
215 or quality to sustain the approved vegetative cover specified in the reclamation plan, topsoil may be  
216 substituted, amended, or brought from off-site. Topsoil amendments, substitution, or replacement  
217 must be free of contamination, free of plant parts or seed of noxious weed or invasive species, and is in  
218 a usable condition for sustaining vegetation during reclamation. If requested by the regulatory  
219 authority, operators must disclose sources of substitute materials.

## 220 **61XX.0120 GRADING AND SLOPES.**

221 Subpart 1. **Safe conditions.** All mine areas must be addressed in the approved reclamation plan,  
222 under **61XX.0200** through **61XX.0260**, and provide for a stable and safe condition consistent with the  
223 operational procedures and post-mining land use.

224 Subp. 2. **Bedrock highwalls.** Upon approval of the regulatory authority, the reclamation plan may  
225 designate bedrock highwalls or other unmined and undisturbed natural solid bedrock as stable and  
226 safe and not in need of reclamation.

227 Subp. 3. **Benching.** Unless approved by the regulatory authority, individual benches must not be  
228 greater than 30 feet high.

229 Subp. 4. **Final slopes.**

230 A. Must not be steeper than a 3:1 horizontal to vertical incline, unless a steeper slope is  
231 determined to be acceptable by meeting one of the following:

232 (1) Steeper slopes existed naturally within mine area prior to commencement of mining  
233 or are required to blend with surrounding natural and stable topography.

234 (2) Steeper slopes are shown to be stable through a field plot demonstration approved  
235 or within a reclamation plan;

236 (3) A steeper slope is determined to be stable through a site-specific engineering  
237 analysis performed by a qualified professional engineer. All areas in the mine area  
238 where topsoil or topsoil substitute material is to be reapplied must be graded or  
239 otherwise prepared prior to topsoil or topsoil substitute material redistribution to  
240 provide optimal adherence between the topsoil or topsoil substitute material and  
241 the underlying material; or

242 (4) An alternative requirement is approved by the regulatory authority, as specified in  
243 part **61XX.0370**.

- 244 B. Must be compacted if significant backfilling is required to produce the final reclaimed slopes  
245 and if the regulatory authority determines that compaction is necessary.
- 246 C. May be left roughly graded but not rutted with small depressions and mounds to provide  
247 micro-topographic variability, trap clay-bearing soil and promote diverse natural  
248 revegetation when reasonable.

249 **61XX.0130 MINELAND WATER BODIES.**

250 Subpart 1. **Goal.** Water bodies within the mine area must be designed, constructed, and  
251 maintained to be structurally sound and minimize hydrologic impacts.

252 Subp. 2. **Operation.**

- 253 A. Water bodies must be designed and constructed to maintain sufficient freeboard and  
254 prevent overtopping of embankments.
- 255 B. Operators must maintain design capacity and function of water bodies through periodic  
256 dredging of settled material.

257 Subp. 3. **Construction of above grade ponds.**

- 258 A. An operator must take proper measures to prevent undesirable seepage from an above  
259 grade pond that could cause water quality degradation, cause flooding outside the mine  
260 area, or adversely affect the stability of the embankments or adjacent slopes.
- 261 B. Qualified professional engineers proficient in the design, construction, operation, and  
262 reclamation of settling ponds must approve the design of the above grade pond.
- 263 C. Design for above grade pond must include subitems 1 through 5.
- 264 (1) Rationale for the site selection, with regard to dam safety and characteristics of the  
265 site that could affect, or could be affected, by the pond;
- 266 (2) Description of materials, construction, and operating performance specifications and  
267 limitations that must be maintained to ensure protection of human safety and  
268 natural resources;
- 269 (3) Survey locations to ensure compliance with the design;
- 270 (4) Schedule for a qualified professional engineer to inspect the construction, operation,  
271 and maintenance of the pond; and
- 272 (5) Description how the pond will be deconstructed and reclaimed during closure of the  
273 mine area.

274 Subp. 4. **Reclaimed water body.**

275 A. Approved final grade at the edge of a mineland water body must:

276 (1) have slopes no steeper than 3:1 horizontal to vertical at designated location or locations,  
277 depending on the size of the water body, to allow for a safe exit; and

278 (2) extend into the water body vertically 6 feet below the lowest seasonal water level as  
279 feasible.

280 B. Operator shall provide measures within the reclamation plan to establish a beneficial water  
281 body by developing natural wildlife habitat and incorporating such features as irregular  
282 shoreline configurations, sinuous bathymetry and shorelines, varied water depths, peninsulas,  
283 islands, and subaqueous areas less than 1.5 foot deep.

284 Subp. 5. **Karst.** In areas where there is less than 50 feet of unconsolidated material directly over  
285 Prairie du Chien Group bedrock, St. Lawrence Formation, or other carbonate bedrock units, the design  
286 and construction of mineland water bodies requires:

287 A. a geotechnical investigation report signed by a qualified professional engineer;

288 B. a geophysical evaluation report, signed by a licensed professional geologist, characterizing  
289 the underlying bedrock for karst features and voids;

290 C. ponding depth less than 10 feet; and

291 D. a liner that meets Minnesota Pollution Control Agency standards for permeability.

292 **61XX.0140 BLASTING STANDARDS.**

293 Subpart 1. **Applicability.** Blasting requirements apply to buildings or other structures with the  
294 following exemptions:

295 A. buildings and structures owned by the operator or landowner and not leased to another  
296 person; and

297 B. buildings and structures owned by the operator or landowner and leased to another person, if a  
298 written and signed waiver by the lessee is submitted to the regulatory authority before blasting.

299 Subp. 2. **Air blast standards.** Air blasts due to blasting operations must not exceed the maximum  
300 limit of 133 dB(L) (0.013 psi). For structures and utilities not defined in **subp. 1**, air overpressure limits  
301 must be independently established based on technical justifications by qualified persons and experts  
302 familiar with blasting related projects.

303 Subp. 3. **Ground vibrations.** The ground vibrations or particle velocity on any axis must not exceed  
304 the limitations specified by [Code of Federal Regulations, title 30, chapter VII, subchapter K, part 816,](#)  
305 [section 816.67, paragraph \(d\)\(4\)](#) as amended. For registered historic structures, the ground vibration  
306 must be no greater than 0.5 inch per second for frequencies less than 10 Hz. For utilities, ground  
307 vibration limits must be independently established based on technical justifications by engineers or  
308 qualified personnel familiar with blasting-related projects.

309 Subp. 4. **Flyrock.** Flyrock travelling in the air or along the ground must not be cast from the blasting  
310 site in an uncontrolled manner that could result in personal injury or property damage. Flyrock must  
311 not be propelled from the mine area onto property for which the owner has not provided a written  
312 and signed waiver to the operator.

313 Subp. 5. **Pre-blast surveys.** The operator shall offer and conduct pre-blast surveys. Survey  
314 requirements must meet items A through D.

- 315 A. At least 45 days prior to the initial blasting, the operator shall notify a resident or owner of a  
316 dwelling or structure of the right to requesting a pre-blast survey for dwellings or structures  
317 located within one-half mile or at a distance of potential impact determined by a scale  
318 distance formula from of any part of the mine area. Means of this notification to the  
319 resident or owner must be approved by the regulatory authority.
- 320 B. A resident or owner of a dwelling or structure within one-half mile or distance of potential  
321 impact determined by a scale distance formula from of any part of the mine area may  
322 request a pre-blast survey. The request must be made, in writing, directly to the operator.  
323 The operator shall promptly conduct a pre-blasting survey of identified dwellings or  
324 structures and promptly prepare a written report of the survey. An updated survey of any  
325 additions, modifications, or renovations must be performed by the operator if requested by  
326 the resident or owner.
- 327 C. Pre-blast surveys must be completed by a third party, independent consultant.
- 328 D. Any survey requested within 14 days before the planned initial blast must be completed by  
329 the operator before the initial blasting.

330 Subp 6. **Monitoring.** The operator shall monitor all blasts. Monitoring stations must be located  
331 adjacent to the nearest structure located on lands not owned or controlled by the operator and where  
332 the regulatory authority deems necessary to investigate complaints. Monitoring protocols include  
333 items A through D.

- 334 A. Blasting seismographs used to monitor ground and air vibrations must comply with current  
335 performance standards for blasting seismographs, as provided by the International Society  
336 of Explosives Engineers.

- 337 B. Blasting seismographs must be deployed in the field according to the current field practice  
338 guidelines for blasting seismographs, as provided by the International Society of Explosives.
- 339 C. When blasting monitoring with a blasting seismograph is not required by the regulatory  
340 authority, the operator must comply with the scaled distance factors at the nearest building  
341 or structure outside the mine area.
- 342 D. The operator shall notify the regulating authority if a blast exceeds the standards in **subp.**  
343 **(2) and subp. (3)** or if flyrock lands onto property for which the owner has not provided a  
344 written and signed waiver to the operator of the blast within seven days of the blast.

345 Subp. 7. **Records.** Operators shall keep a blaster's log of production blasts at the mine area, which  
346 must be retained for 3 years from the date of the blast. The log must contain the following  
347 information:

- 348 A. date and time of blast;
- 349 B. type of explosive used;
- 350 C. ignition layout with locations of blast holes and time intervals of delay;
- 351 D. pounds of explosives per each delay of eight milliseconds or more;
- 352 E. total pounds of explosives;
- 353 F. types of material blasted;
- 354 G. monitoring locations and results of monitoring when conducted;
- 355 H. meteorological conditions that include cloud cover, wind speed and directions as can be  
356 determined from the United States Weather Bureau, and ground-based observations; and
- 357 I. directional orientation of free faces of bench to be blasted.

358 **61XX.0150 INTERMITTENT MINING.**

359 Intermittent mining may be conducted by an operator provided that the possibility of a temporary  
360 shutdown of operations is addressed in an operator's reclamation plan, no environmental pollution or  
361 erosion of sediments is occurring, and financial assurance for reclamation under **61XX.0220** is  
362 maintained covering all remaining portions of the site that have been affected by silica sand mining  
363 and that have not been reclaimed.

364 **RECLAMATION PLAN**

365 **61XX.0200 APPLICATION REQUIREMENTS.**

366 Subpart 1. **Application contents.** An operator who conducts or plans to conduct silica sand mining  
367 shall submit to the regulatory authority an application conforming to subsection A through I.

- 368 A. The names, addresses, and telephone numbers of all persons or organizations who are  
369 owners or lessors of the property on which the mine area is located.
- 370 B. The name, address, and telephone number of the person or organization who is the  
371 operator.
- 372 C. The organizational structure of the applicant including, parent companies, owners, partners,  
373 joint venturers or affiliated companies.
- 374 D. The organizational relationships between or among joint applicants.
- 375 E. A certificate issued by an insurance company authorized to do business in the United States  
376 that the operator has a public liability insurance policy in force for the mining operation for  
377 which the reclamation plan approval is sought, or evidence that the operator has satisfied  
378 other state or federal self-insurance requirements, to provide personal injury and property  
379 damage protection in an amount adequate to compensate any persons who might be  
380 damaged as a result of the mining operation or any reclamation or restoration operations  
381 connected with the mining operation.
- 382 F. The following certifications must be submitted as condition of the reclamation plan:
- 383 (1) A certification by the operator and landowner of their intent to comply with reclamation  
384 standards established by 61XX.0100 through 61XX.0150; and
- 385 (2) A certification that the operator will provide financial assurance as required by  
386 61XX.0220 upon approval of the reclamation plan before mining construction begins or  
387 transfers of the reclamation plan under 61XX.0380.
- 388 G. List civil and criminal fines relating to the permit to mine or environmental violation that the  
389 operator or affiliate companies have been issued over the past 10 years.
- 390 H. A map of the location of the proposed mine area with a brief description of the nature of  
391 the mine area.
- 392 I. A reclamation plan approved and signed by a qualified professional with demonstrated  
393 knowledge on similar projects that conforms to 61XX.0100 through 61XX.0260.

394 Subp. 2. **Information.** The operator shall provide digital geospatial information used to fulfill the  
395 requirements of 61XX.0100 through 61XX.0260 to the regulatory authority upon request. To avoid  
396 duplication, the plan application and submittals required by subp (1), may incorporate existing plans or  
397 materials that meet the requirements of this chapter.

398 **61XX.0210 PRE-MINING CONDITIONS.**

399 Subpart. 1. **Goal.** To establish baseline measurements to be used for reclamation planning, existing  
400 conditions of the mine area must be described before construction of any mining operations.

401 Subp. 2. **Requirements.**

- 402 A. Maps of the location of the mine area including property boundaries, ownership within the  
403 mine area and one-half mile adjacent to mine area.
- 404 B. Maps and description of current land use of mine area and one-half mile adjacent to the  
405 mine area including location and type of all structures, noting the location of registered  
406 historical structures, within and one-half mile adjacent to mine area, including pipelines and  
407 utilities.
- 408 C. Map of the distribution, thickness and type of topsoil within the proposed or existing mine  
409 area.
- 410 D. Geologic setting of the deposit to be excavated including the following:
- 411 (1) a description of the bedrock geology;
- 412 (2) areal extent, thickness, depth, and geologic composition of the deposit; and
- 413 (3) thickness and characterization of overburden.
- 414 E. Description of the surface hydrology that includes the following;
- 415 (1) the location of the mine area within the major and minor watersheds,
- 416 (2) the location of existing draining patterns, streams, rivers, lakes, springs, seeps, and  
417 wetlands, including calcareous fens, located within or adjacent to the project area;
- 418 (3) the location of sinkholes, caves or known surface karst features within or one-half mile  
419 adjacent to the mine area boundary.
- 420 F. Description of any part of the mine area that is within one mile of a designated trout stream  
421 contained within the boundaries of the Department of Natural Resources Paleozoic Plateau



422 Ecological Section and requires a permit as provided by Minnesota Statutes, section  
423 103G.217.

- 424 G. Hydrogeological description of the mine area that includes the location of the approximate  
425 elevation of groundwater in feet above mean sea level within the mine area, direction of  
426 ground water flow within the water table aquifer and confined aquifers within the mine  
427 area, the location of all wells, including wells not registered on the County Well Index,  
428 within 1.5 miles of the boundary of the mine area. In specific instances where the existing  
429 hydrogeological information is insufficient for purposes of the reclamation plan, the  
430 applicant may supplement the information with the opinion of a licensed professional  
431 geologist.
- 432 H. Existing topography as shown on contour maps of the site at intervals specified by the  
433 regulatory authority.
- 434 I. Maps of existing roads, railroads, and transportation infrastructure within the proposed or  
435 existing mine area.
- 436 J. For proposed project sites that include previously mined areas, a plan view drawing that  
437 shows the location and extent of land previously affected by surface mining, including the  
438 locations of piles, wash ponds, sediment basins, and other features that may be specified by  
439 regulatory authority. The operator must include all approved reclamation plans associated  
440 with previous mining activity.
- 441 K. Map and description of pre-European settlement vegetation within the mine area.
- 442 L. Within the mine area, map or assessment of existing biological resources, known or inferred  
443 threatened or endangered species, and plant communities.
- 444 M. An official letter from the State Historical Preservation Office releasing the mine area of any  
445 additional cultural resource assessment requirements.

446 **61XX.0211 DESCRIPTION OF MINING ACTIVITIES.**

447 Subpart 1. **Goal.** A description of the expected mining activities must be provided to the regulatory  
448 authority.

449 Subp. 2. **Requirements.**

- 450 A. Description of the projected life of the operations including beginning and ending of  
451 operations and any phases or stages.

- 452 B. Description of blasting activities and submission of a blasting plan that meets the standards  
453 of **61XX.0140**.
- 454 C. Map of the proposed mine area that includes subitems 1 through 7.
- 455 (1) Boundaries of the areas to be disturbed by mining.
- 456 (2) Setback boundaries that apply to the project site.
- 457 (3) Avoidance areas with description on the reason for avoidance.
- 458 (4) All permanent boundary markers.
- 459 (5) Location of buffers, berms, fences, and gated mine entrance.
- 460 (6) Location of proposed and existing water wells, operation plants, processing areas,  
461 load out sites, and transportation related infrastructure within the mine area.
- 462 (7) If applicable, the location of natural highwalls that will not be excavated.
- 463 E. A topsoil management and preservation plan that meets the standards of **61XX.0110**.
- 464 F. Location and description of mineland water bodies. Descriptions of above grade pond  
465 design must include information specified in **61XX.0130, sub 2, item C**.
- 466 G. Description of the anticipated lowest mined elevation in feet above mean sea level.
- 467 H. Description of how invasive species and noxious weeds will be controlled within the mine  
468 area including stockpiles, berms, and road shoulders.
- 469 I. If intermittent mining is expected to occur within the mine area, a description of subitems 1  
470 through 5 for the periods of temporary shutdown.
- 471 (1) Reasonable efforts to address public safety.
- 472 (2) Reasonable efforts to prevent vandalism, illegal dumping, and trespassing.
- 473 (3) Maintenance or removal of mining infrastructure and on-site buildings.
- 474 (4) Control methods to prevent erosion and off-site sedimentation.
- 475 (5) Site-inspection schedule by the operator.

476 **61XX.0212 POST-MINING LAND USE.**

477 Subpart 1. **Goal.** The reclamation plan must specify a proposed post-mining land use for the mine  
478 area. The proposed post-mining land use must be consistent with local land use plans and local zoning  
479 at the time the plan is submitted, unless a future change to the land use plan or zoning is proposed.  
480 The proposed post-mining land use must also be consistent with any applicable state, local, or federal  
481 laws in effect at the time the plan is submitted.

482 Subp. 2. **Requirements.**

- 483 A. A description of the proposed earthwork and reclamation, including final slope angles,  
484 highwall reduction, benching, terracing, and other structural slope stabilization measures  
485 and if necessary a site-specific engineering analysis performed by a qualified professional.
- 486 B. The description of material used in reclamation and methods used to replace and stabilize  
487 topsoil, subsoil, overburden, topsoil substitute material, and waste sand. Redistribution of  
488 earthen materials must occur in stratigraphic order.
- 489 C. A plan or map which shows anticipated topography of the reclaimed site and any water  
490 impoundments or artificial lakes.
- 491 D. A plan or map which shows remaining surface structures, roads, and related facilities after  
492 the completion of mining.
- 493 E. Indexed estimation of the cost of reclamation in the first stage of the project or the entire  
494 site if phased reclamation is not planned.
- 495 F. A revegetation plan delineating the timing and methods of seed bed preparation, rates and  
496 kinds of soil amendments, seed mix, seed application timing, mulching, netting and any  
497 other techniques needed to accomplish soil and slope stabilization. The revegetation plan  
498 must meet the criteria of 61XX.0240 or provide alternative criteria to be approved by the  
499 regulatory authority.
- 500 G. A description and drawing, showing erosion control measures to be employed during  
501 reclamation activities.
- 502 H. A description of how the reclamation plan addresses the long-term safety of the reclaimed  
503 mining site. The description must include a discussion of site-specific safety measures to be  
504 implemented at the site and include measures that address public safety with regard to  
505 adjacent land use.

506 **61XX.0220 FINANCIAL ASSURANCE.**

507 Subpart 1. **Purpose.** The purpose of financial assurance is to ensure a source of funds exists to be  
508 used by the regulatory authority to cover all costs incurred by the regulatory authority for  
509 administrating the reclamation plan if the operator fails to perform items A and B.

510 A. Reclamation activities including closure and postclosure maintenance needed if operations  
511 cease; and

512 B. Corrective action as required by the regulatory authority if noncompliance with design and  
513 operating criteria in the reclamation plan.

514 Subp 2. **Applicability.** Financial assurance is required for each mine area. Multiple mine areas may  
515 be combined as allowed in **Subp. 6**. A state, county, municipality, or township operating a mine area is  
516 not required to obtain financial assurance.

517 Subp. 3. **Reclamation cost estimates.** An operator intending to conduct a silica sand mining  
518 operation must submit to the regulatory authority, as part of the reclamation plan, a documented  
519 estimate of the cost necessary to implement the reclamation plan under part **61XX.0200** through  
520 **61XX.0230** and corrective actions **61XX.0260**. Financial assurance must be payable exclusively to the  
521 regulatory authority that has jurisdiction and who issues the approval for the reclamation plan.

522 A. Cost estimate must be based on the following:

523 (1) current dollar value at the time of the estimate;

524 (2) an itemized cost estimate of each mine area for the regulatory authority of administer  
525 and hire third parties to implement either the final reclamation or contingency  
526 reclamation according to the approved reclamation plan of all silica sand sites the  
527 operator has under permit; and

528 (3) the cost of necessary postclosure monitoring and maintenance requirements.

529 B. No salvage value attributed to the sale of wastes, silica sand stockpiles, facility structures,  
530 equipment, land or other assets must be used for estimating purposes.

531 C. The financial assurance is dictated by the period of time required for the site to be self-  
532 sustaining in a manner protective of natural resources and in accordance with the approved  
533 reclamation plan and when postclosure maintenance is no longer necessary.

534 Subp. 4. **Corrective action cost estimates.** When the regulatory authority determines that a  
535 corrective action plan is required under part **61XX.0260**, the operator shall submit a documented  
536 estimate of costs to perform the corrective action before implementation.

- 537 A. The operator shall provide annually adjusted cost estimates for corrective action to the  
538 regulatory authority undertaken according to an approved corrective action plan under  
539 **61XX.0260, subp. 2.**
- 540 B. Itemized cost estimate must be based on the following:
- 541 (1) current dollar value at the time of the estimate; and
- 542 (2) the cost to the regulatory authority of administering and hiring a third party to conduct  
543 corrective action activities.

544 **Subp. 5. Criteria for financial assurance mechanisms.** Financial assurance mechanisms for  
545 reclamation and for corrective action must meet the items A through F to be approved for use.

- 546 A. The mechanism must equal the amount determined by **subp. 3**, for post closure care, and  
547 corrective action and must be available to the regulatory authority at all times.
- 548 B. The mechanism must be fully valid, binding, and enforceable under state and federal law.
- 549 C. Assurance that the funds can be accessed by the regulatory authority by action within  
550 boundaries of the United States.
- 551 D. The financial assurance mechanism must not be dischargeable through bankruptcy.
- 552 E. Assurance the regulatory authority will be notified 120 days prior to the cancellation of a  
553 financial assurance mechanism.
- 554 F. The regulatory authority may accept a lesser initial amount of financial assurance at the  
555 beginning of a new project or transfer of a project provided that the operator initiates a  
556 process to continuously increase the amount of financial assurance until it is adequate to  
557 effect reclamation. An escrow account in cash may be established that is based on  
558 production gross sales and serves to provide regular payments to an account that is  
559 designed to grow to the amount necessary to guarantee performance of reclamation by the  
560 expected time of reclamation.

561 **Subp. 6. Form and management.** The operator shall provide financial assurance that is acceptable  
562 to the regulatory authority.

- 563 A. All terms and conditions of the financial assurance must be approved by the regulatory  
564 authority. The regulatory authority, in evaluating financial assurance, shall use individuals  
565 with documented experience in the analysis. The reasonable cost of the evaluation must be  
566 paid by the applicant.

- 567 B. Financial assurance must be submitted to the regulatory authority for approval before the  
568 approval of the reclamation plan and before granting a significant amendment to the plan.
- 569 C. Financial assurance arrangements may include, at the discretion of the regulatory  
570 authority, more than one mechanism.
- 571 D. The amount of financial assurance must be reviewed as needed but no less than every three  
572 years to assure the financial assurance equals outstanding reclamation costs. The regulatory  
573 authority may notify the operator in writing about the review of financial assurance.
- 574 (1) If the new cost estimate approved by the regulatory authority is greater than the  
575 amount of the existing financial assurance, the operator shall provide additional  
576 financial assurance in an amount equal to the increase, or
- 577 (2) If the new cost estimate approved by the regulatory authority is less than the amount of  
578 existing financial assurance, the operator shall be released from maintaining financial  
579 assurance in an amount equal to the decrease.
- 580 E. The regulatory authority may cancel a financial assurance mechanism, only after it is  
581 replaced by an alternate mechanism or after the operator is released from financial  
582 assurance according to **subp. 8**.
- 583 F. Financial assurance must meet the criteria of **subp. 5**.

584 **Subp. 7. Multiple projects.** With approval by the regulatory authority, an operator who obtains a  
585 plan approval from the regulatory authority for two or more silica sand sites within their jurisdiction  
586 may elect, at the time the second or subsequent site is approved, to post a single financial assurance in  
587 lieu of separate financial assurance mechanism for each silica sand mining site. When an operator  
588 elects to post a single financial assurance in lieu of separate financial assurances for each mining site,  
589 financial assurances previously posted on individual mining sites must not be released until the new  
590 financial assurance has been accepted by the regulatory authority and is in effect.

591 **Subp. 8. Multiple jurisdictions.** In cases where more than one regulatory authority has jurisdiction,  
592 a cooperative financial security arrangement may be developed and implemented by the regulatory  
593 authorities to avoid requiring the operator needing to prove financial assurance with more than one  
594 regulatory authority for the same silica sand mining site.

595 **Subp. 9. Forfeiture of financial assurance.** Financial assurance must be made available to the  
596 regulatory authority under items A to C when the operator is not in compliance with either the  
597 reclamation plan or the corrective action plan.

- 598 A. A proceeding to access financial assurance must be commenced by:

- 599 (1) serving an order to forfeit the financial assurance on the person, institution, or trustee  
600 holding the financial assurance; and
- 601 (2) serving a notice to the operator of the measures required to correct the situation and  
602 the time available for correction.
- 603 B. If conditions that provided grounds for the order are corrected within a period established  
604 by the regulatory authority and if measures approved by the regulatory authority are taken  
605 to ensure that the conditions do not recur, the order must be canceled.
- 606 C. If the conditions that provided grounds for the order are not corrected, the regulatory  
607 authority shall proceed with accessing and expending the funds provided by this part to  
608 implement the contingency reclamation or corrective action plans.

609 Subpart 10. **Failure to comply.** The regulatory authority shall take one or more of the following  
610 actions if the failure to comply with any portion of this part occurs:

- 611 A. deny the reclamation plan approval under part 61XX.0340;
- 612 B. modify the reclamation plan under part 61XX.0350; or
- 613 C. suspend or revoke a reclamation plan approval under part 61XX.0360.

614 **61XX.0230 ANNUAL REPORTING REQUIREMENTS.**

615 Subpart 1. **Goal.** To maintain approval status of the reclamation plan, the operator shall submit  
616 annual reports for all active and intermittent mining areas to the regulatory authority for each calendar  
617 year until silica sand mining reclamation at the site is certified as complete under 61XX.0230 subp. 2 or  
618 at the time of release of financial assurance under 61XX.0230.

619 Subp 2. **Requirements.** The annual report must include items A through H.

- 620 A. The name and mailing address of the operator.
- 621 B. Location of the mine area with permit number and parcel identification number if available.
- 622 C. The acreage currently affected by silica sand mining and not yet reclaimed.
- 623 D. The amount of acreage that has been reclaimed to date on a permanent basis and the  
624 amount reclaimed on a temporary basis.
- 625 E. A plan, map or diagram accurately showing the acreage described in subdivision D and E.

- 626 F. Updated financial assurance describing the cost estimate if operations were to close in the  
627 upcoming year.
- 628 G. A certificate issued by an insurance company authorized to do business in the United States  
629 that the operator has a public liability insurance policy in force for the mining operation for  
630 which the reclamation plan approval is sought, or evidence that the operator has satisfied  
631 other state or federal self-insurance requirements, to provide personal injury and property  
632 damage protection in an amount adequate to compensate any persons who might be  
633 damaged as a result of the mining operation or any reclamation or restoration operations  
634 connected with the mining operation.
- 635 H. The following certification, signed by the operator: "I certify that this information is true  
636 and accurate, and that the mine area described herein complies with all conditions of the  
637 applicable silica sand reclamation plan approval and Chapter 61XX, Minnesota Rules.

638 Subp. 3. **Submission.** The annual report must be submitted by a date specified by the regulatory  
639 authority.

640 Subp 4. **Alternative report.** A regulatory authority may, at its discretion, obtain the information  
641 required in subp. 2 for a calendar year by written documentation of its inspections of a silica sand  
642 mining site. If the regulatory authority obtains and documents the required information, the annual  
643 report need not be submitted by the operator. If the regulatory authority determines that the operator  
644 need not submit an annual report under this subsection, the regulatory authority shall advise the  
645 operator in writing at least 30 days before the end of the applicable calendar year. In that case, the  
646 regulatory authority shall require the operator to submit the certification required in subp. 2, items F  
647 and G.

648 Subp 5. **Records.** A regulatory authority shall retain annual reports required by subp. 2 or  
649 equivalent records as provided in subp. 4 for 10 years after they are submitted, and shall make them  
650 available upon request by the public.

651 **61XX.0240 CRITERIA FOR SUCCESSFUL COMPLETION OF RECLAMATION.**

652 Subpart 1. **Goal.** The criteria for assessing when reclamation is complete and, therefore, when the  
653 financial assurance may be released, shall be specified in the reclamation plan and approved by the  
654 regulatory authority. Reclamation criteria shall be specified in one, three, and five year increments.

655 Subp 2. **Upland requirements.** After five growing seasons following revegetation, a 90 percent  
656 cover consisting of living vegetation and its litter, must exist on all areas. No more than 10 percent  
657 cover of invasive, non-native vegetation is allowed.



658 Subp 3. **Wetland requirements.** After five growing seasons following revegetation, a 70 percent  
659 cover consisting of native grasses, sedges and forbs. No more than 10 percent cover of invasive, non-  
660 native vegetation is allowed.

661 Subp 4. **Comparisons.** If required by the regulatory authority, the operator shall obtain baseline  
662 data on the existing plant community for use in the evaluation of reclamation success. Revegetation  
663 success may be determined by the following comparisons:

- 664 A. to an appropriate reference area;
- 665 B. to baseline data acquired at the mining site prior to its being affected by mining; or
- 666 C. to an approved alternate technical standard.

667 **61XX.0250 POST-CLOSURE MAINTENANCE.**

668 During the period of the site reclamation, after the operator has stated that reclamation is complete  
669 but prior to release of finance assurance, the operator shall perform any maintenance necessary to  
670 prevent erosion, sedimentation or environmental pollution, comply with the standards of **61XX.0100**  
671 through **61XX.0150**, or to meet the goals specified in the reclamation plan.

672 **61XX.0260 CORRECTIVE ACTIONS.**

673 Subpart 1. **Goal.** On the observation of violations of the permit to mine, immediate actions shall  
674 be taken to correct the violation.

675 Subp. 2. **Requirements.** Corrective action requirements include those in items A to D.

676 A. When the operator is aware that the reclamation requirements of parts **61XX.0200** and  
677 **61XX.0240** are not being met, the operator shall immediately notify the regulatory  
678 authority.

679 B. On notification or observation of violations of parts **61XX.0100** through **61XX.0410**, the  
680 regulatory authority shall order the operator to:

681 (1) immediately take corrective action, or

682 (2) submit, within two weeks, a corrective action plan for approval before the operator  
683 implements corrective action that includes:

684 (a) cause for failure to comply;

685 (b) methods, sequence, and schedule of corrective action activities that will result in  
686 compliance

- 687 (c) corrective action cost estimates, and
- 688 (d) maps and cross sections at an appropriate scale.

689 C. If there is an immediate threat to human safety or natural resources resulting from the  
690 mining operation, the operator shall take immediate corrective action and report to the  
691 regulatory authority.

692 D. The regulatory authority may take one or more of the following actions if the operator fails  
693 to comply with any portion of this part:

- 694 (1) suspend or revoke the reclamation plan under part 61XX.0360.
- 695 (2) modify the reclamation plan under part 61XX.0350.

## 696 ADMINISTRATIVE PROCESSES

### 697 61XX.0300 RECLAMATION PLAN SUBMISSION.

698 Subpart 1. **Purpose.** The purpose of this section is to establish requirements and procedures for the  
699 processing a complete submission and administration of silica sand reclamation plans.

700 Subp. 2. **Decision.** The regulatory authority shall approve, approve conditionally, or deny a  
701 reclamation plan under 61XX.0310 through 61XX.0430.

### 702 61XX.0310 PUBLIC NOTICE.

703 Subpart 1. **Notice.** A regulatory authority that has received and determined that the reclamation  
704 plan application meets the requirements of 61XX.0100 through XXXX.0260 shall publish a public notice  
705 of the application in a qualified newspaper under Minnesota Statutes, section 331A.02 that is  
706 circulated in the locality of the proposed mining operation no later than 30 days after receipt of a  
707 complete reclamation plan. The notice must contain items A through E.

- 708 A. A brief description of the mining and reclamation planned at the mine area.
- 709 B. Location or map of the mine area.
- 710 C. Mine ownership and operator contact information.
- 711 D. Mention the opportunity for public meeting under this section.
- 712 E. The locations at which the public may review the reclamation plan request and all  
713 supporting materials.
- 714 F. A notice of the deadline date and contact information for filing objections.

715 Subp. 2. **Local Meeting.** A regulatory authority shall provide for the opportunity for a public  
716 informational meeting on an application or request to approve a mine reclamation plan as follows:

717 A. if there is meeting on the local permit to mine for the mine area, the regulatory authority  
718 shall provide an opportunity at this meeting to present testimony on reclamation related  
719 matters. This opportunity must fulfill the requirement for public meeting for a silica sand  
720 reclamation plan required by this section. The regulatory authority shall consider the  
721 reclamation-related testimony in the local permit to mine meeting in deciding on the  
722 adequacy of a reclamation plan; or

723 B. if there is no opportunity for a local permit to mine for the mine area as described in item A,  
724 an opportunity for public meeting required by this section must be provided as follows. Any  
725 person residing within, owning property within, or whose principle place of business is  
726 within 1000 feet of the boundary of the parcel or parcels of land in which the mine area is  
727 located or proposed may request a public informational meeting within 30 days of the  
728 actual date of public notice under **subp. 1**. This public meeting must be conducted as an  
729 information meeting for the purpose of explaining and receiving comment from affected  
730 persons on the nature, feasibility and effects of the proposed reclamation.

731 **61XX.0320 COMMENTS.**

732 Subpart 1. **Filing.** Comments related to a proposed reclamation plan application may be filed with  
733 the regulatory authority no later than 45 days following the notice of publication.

734 Subp. 2. **Comment statement.** A person submitting an objection statement to the regulating  
735 authority shall include the following information in items A through C.

736 A. A statement of the person's interest in the proposed reclamation plan;

737 B. A statement of the action that the person wants the regulatory authority to take, including  
738 specific references to the plan or application; and

739 C. The reasons supporting the person's position, stated with sufficient specificity to allow the  
740 regulatory authority to investigate the merits of the person's position.

741 Subp. 3. **Considerations.** All comments must be considered by the approved authority.

742 **61XX.0330 DETERMINATION.**

743 Subpart 1. **Issuance.** Unless denied under **61XX.0340**, the regulatory authority shall approve in  
744 writing the reclamation plan submitted under **61XX.0200** for a proposed silica sand mining project. The  
745 decision must be made no later than 120 days following receipt of the complete reclamation plan that

746 meets the requirements of 61XX.0210 through 61XX.0220, unless a public meeting is held under  
747 61XX.0310 subp 2.

748 Subp. 2. **Conditions.** The regulatory authority may approve a reclamation plan subject to  
749 general or site-specific conditions if needed to assure compliance with the reclamation requirements  
750 of this chapter. One required condition of the approved reclamation plan must be that the mine  
751 obtains financial assurance under 61XX.0220 prior to construction or disturbance under this plan.

752 Subp. 3. **Multiple jurisdictions.** If more than one regulatory authority has jurisdiction over a single  
753 mine area, the regulatory authorities shall cooperatively issue a single approval for the reclamation  
754 plan.

#### 755 **61XX.0340 DENIAL.**

756 Subpart 1. **Authority.** The denial of a reclamation plan must be made in writing no later than 120  
757 days following the receipt of the complete reclamation plan. The denial must contain documentation  
758 and a findings of fact with reasons for denial.

759 Subp. 2. **Grounds for denial.** A reclamation plan must be denied if the regulatory authority finds  
760 any of the following:

- 761 A. The proposed mine area cannot be reclaimed in compliance with the reclamation standards  
762 of 61XX.0100 through 61XX.0170 or the applicable local land use ordinance.
- 763 B. The applicant, or its agent, principal or predecessor has, during the course of silica sand  
764 mining in Minnesota, within 10 years of the plan application or modification request being  
765 considered, shown a pattern of serious violations of this chapter or of federal, state or local  
766 environmental laws related to silica sand reclamation. The regulatory authority may  
767 consider the following:
- 768 1. results of judicial or administrative proceedings involving the operator or its agent,  
769 principal, or predecessor.
  - 770 2. suspensions or revocations of silica sand mining permits or reclamation plans.
  - 771 3. forfeiture of financial assurance.

#### 772 **61XX.0350 MODIFICATION.**

773 Subpart 1. **Modification by regulatory authority.** A regulatory authority may order the modification  
774 of a reclamation plan when the regulatory authority determines that:

- 775 A. it is necessary to correct conditions that jeopardize public health or safety or that could  
776 result in injury to persons or property;
- 777 B. because of changing conditions, the silica sand mining area is no longer in compliance with  
778 the reclamation plan or parts 61XX.0100 through 61XX.0260.
- 779 C. new information related to reclamation becomes available that needs to be addressed and  
780 incorporated into the reclamation plan.

781 Subp. 2. **Modification by the operator.** If an operator desires to modify a silica sand reclamation  
782 plan, the operator shall submit an application to modify the plan to the regulatory authority. The  
783 application must be subject to the requirements of this chapter. The regulatory authority shall make a  
784 determination if the modification constitutes a substantial change from the reclamation plan.

785 Subp. 3. **Determination.** If the regulatory authority determines a substantial change would occur,  
786 the regulatory authority can require the submittal of all or a portion of the requirements in 61XX.0100  
787 through 61XX.0260 and follow proceedings specified in 61XX.0310 through 61XX.0330.

#### 788 61XX.0360 SUSPENSION OR REVOCATION.

789 Subpart 1. **Grounds.** A regulatory authority may suspend or revoke a reclamation plan issued under  
790 this chapter if it finds that the operator has done any of the following:

- 791 A. failed to submit a satisfactory annual report within the time frames specified in this  
792 subchapter;
- 793 B. failed to submit or maintain financial assurance as required by this chapter;
- 794 C. failed to comply with corrective actions; or
- 795 D. failed on a repetitive and significant basis to follow the approved reclamation plan.

796 Subp. 2. **Suspension.** If the regulatory authority makes any of the findings in subpart 1, the  
797 regulatory may suspend a reclamation plan. During the time of suspension, the operator may not  
798 conduct mining at the site, except for reclamation or measures to protect human health and the  
799 environment as ordered by the regulatory authority. Operator must maintain financial assurance under  
800 61XX.0220.

801 Subp. 3. **Revocation.** If a regulatory authority makes any of the findings in subpart 1, the regulatory  
802 authority may revoke its silica sand reclamation plan approval. Upon revocation, the operator shall  
803 forfeit the financial assurance it has provided under 61XX.0220 to the regulatory authority. The  
804 regulatory authority may use forfeited financial assurance to reclaim the site to the extent needed to  
805 comply with this chapter.

806 **61XX.0370 ALTERNATIVE REQUIREMENT APPROVALS.**

807 Subpart 1. **Criteria.** A regulatory authority may approve an alternate requirement to the  
808 reclamation standards established in this chapter if the operator demonstrates and the regulatory  
809 authority finds the criteria A through C are met.

810 A. The silica sand mining site, the surrounding property, the mining plan, or reclamation plan  
811 has a unique characteristic which requires an alternate requirement.

812 B. Unnecessary hardship which is peculiar to the silica sand mining site or plan will result  
813 unless the alternate requirement is approved.

814 C. Reclamation in accordance with the proposed alternate requirement will achieve the  
815 planned post-mining land use and long term site stability in a manner that will not cause  
816 environmental pollution or threaten public health, safety or welfare.

817 Subp 2. **Procedures.**

818 A. An operator who requests an alternate requirement shall submit the request in writing as  
819 required in the applicable local land use ordinance.

820 B. If the regulatory authority is a county or municipality, the alternate requirement must be  
821 approved or disapproved as provided in the applicable local land use ordinance. Approval or  
822 disapproval must be in writing and must contain documentation of the reasons why the  
823 alternate requirement was or was not approved.

824 C. A request for an alternate requirement may be incorporated as part of an application to  
825 issue or modify a silica sand reclamation plan.

826 D. An applicable reclamation ordinance may provide opportunity for public informational  
827 meeting under this subchapter prior to the regulatory authority's action on a request for an  
828 alternate requirement.

829 **61XX.0380 TRANSFERS.**

830 A new operator may apply for a transfer of an approved reclamation plan upon submittal to the  
831 regulatory authority the information under **61XX.0200 items A through I**. The previous operator shall  
832 maintain financial assurance until the new operator has received approval and provided the financial  
833 assurance under this section. The transfer is not valid until meeting all of the following criteria:

834 (1) the new operator submits financial assurance under **61XX.0220**;

835 (2) the regulatory authority accepts the financial assurance; and

836 (3) the regulatory authority determines compliance with all conditions of the approved  
837 reclamation plan.

838 **61XX.0390 CHANGE OF REGULATORY AUTHORITY.**

839 If there is a change of regulatory authority for a mine area, the approved reclamation plan must remain  
840 in effect and be enforceable until the plan is modified by the new regulatory authority.

841 **61XX.0400 REVIEW OF DECISION.**

842 Any persons who meet the requirements of **XXXX.0000**, may request a contested case meeting  
843 under **XXXX.0000**, on a county or municipal regulatory authority's decision to approve, deny or modify  
844 a silica sand reclamation plan. *STILL IN DEVELOPMENT*

845 **61XX.0410 NOTICE OF COMPLETION.**

846 Subpart 1. **Request.** The operator shall submit to the regulatory authority a request to be  
847 released from an approved reclamation plan. The request must include items A through C.

- 848 A. A declaration by the operator of how each portion of the mine area for which a release is  
849 requested has been made to comply with the requirements of parts **61XX.0100** to  
850 **61XX.0260** and the conditions placed within the local permit to mine.
- 851 B. Identification of the ownership of the mine area.
- 852 C. A map that prepared by a qualified professional that shows the following:
- 853 (1) the location and status of all mining land forms and facilities created or used during the  
854 mining operation;
- 855 (2) the areas for which the release is being requested;
- 856 (3) location of open and sealed water wells;
- 857 (4) the areas on which postclosure maintenance is being conducted;
- 858 (5) the final topography of all mining land forms;
- 859 (6) the location, type, extent, percent coverage of vegetation that has been established;
- 860 (7) the existing and ultimate anticipated level of groundwater;
- 861 (8) the locations of safe access points of any constructed water body;

- 862 (9) if applicable, the location of all sealed access points to underground mine workings;
- 863 (10) the location of any approved highwalls or gradients that exceed a 3:1 horizontal to  
864 vertical slopes; and
- 865 (11) other tests or borings specified by regulatory authority within the approved  
866 reclamation plan.

867 **61XX.0420 RELEASE OF FINANCIAL ASSURANCE.**

868 Subpart 1. **Notification.** The operator shall apply to the regulatory authority for the release of  
869 financial assurance, by filing a notice of completion under **61XX.0410**, at the time the operator  
870 determines that reclamation of any portion of the mine area, corrective action, or entire mine area  
871 satisfies all terms and conditions of parts **61XX.0100** to **61XX.0260**.

872 Subp. 2. **Determination of completeness.** The regulatory authority shall inspect the mine area or  
873 portion thereof that was the subject of the notice of completion to make a determination of  
874 completion using criteria under **61XX.0240**. The regulatory authority, in evaluating reclamation  
875 completion, shall use individuals with documented experience in the analysis. The reasonable cost of  
876 the evaluation must be paid by the applicant. The regulatory authority shall make a determination  
877 under this subsection that:

- 878 A. Reclamation is not yet complete;
- 879 B. It is not possible to assess whether reclamation is complete due to weather conditions,  
880 snow cover or other relevant factors;
- 881 C. Reclamation is fully complete and conditions necessitating postclosure maintenance no  
882 longer exist and are unlikely to recur;
- 883 D. Corrective actions have been successfully accomplished.

884 Subp 3. **Release.** The regulatory authority shall release the operator from the responsibility to maintain  
885 financial assurance within 90 days of a determination of completion under in **subp 2. C or D**; unless the  
886 determination for release is challenged in a legal proceeding.

887 **61XX.0430 REGULATORY AUTHORITY RIGHT OF INSPECTION**

888 Subpart 1. **Access.** No person may refuse entry or access onto a mine area of a duly authorized  
889 office, employee, or agent of the regulatory authority who presents appropriate credentials to inspect  
890 the site for compliance with silica sand reclamation plan required by **61XX.0100** through **61XX.0260**.



891 Subp. 2. **Inspector requirements.** Any person who enters the site under this right of inspection shall  
892 obtain training and provide their own safety equipment needed to comply with any federal, state, or  
893 local laws or regulations controlling persons in the silica sand mining area.

894 Subp. 3. **Records.** If requested, the regulatory authority shall furnish to the operator a written  
895 report of its inspection under this section, setting forth all relevant observations, information, and data  
896 which relate to the mine area's compliance status under this chapter.

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