**SCML 9 Refuse Cover Variance Request Form**

SCML-9 forms shall be completed and submitted via email directly to the Refuse Committee Chairperson (Kristi Dodson, kristi.dodson@illinois.gov), **prior** to inclusion of a cover variance proposal as a portion of a Significant Revision or Insignificant Permit Revision application. Any maps, plans, data, or related documentation may be submitted as attachments corresponding to SCML-9 form part and question.  **The Department suggests communication with the IEPA early in the cover variance request process.**

The Department will advise the operator or permittee of decision to deny the variance proposal, or approve the proposal for further evaluation, via letter. **An approval letter for further evaluation of the proposal shall be included in Part 9.4.1 of the application for a permit revision along with the completed SCML-9 form**.

**Part 1. General Information**

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| **Permittee:** |  |
| **Mine Name:** |  |
| **Permit No(s).:** |  |
| **No. of acres involved in request:** |  |

**Part 2. Refuse Disposal Area Information** (62 Ill. Adm. Code 1780.18(b)/1784.13(b) and 1816/1817.83(c)(4))

1. Provide information regarding the specific refuse disposal area (RDA) involved in the cover variance request including structure name and/or general location, nature and age of the RDA (gob pile, incised slurry impoundment, above grade slurry impoundment, etc.), and current disposition of the structure.

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1. Provide information regarding the quality of the refuse (coarse refuse and/or slurry, as applicable) including potential acidity (PA), net neutralization potential (NNP), soluble salt concentration (mmhos/cm), cation exchange capacity (CEC) and corresponding base saturations of potassium (K), calcium (Ca), magnesium (Mg) and sodium (Na) concentration. Provide specifics of the sampling that occurred to obtain the information (pipe discharge point samples, grid samples, and depth of samples, etc.).

*Please note that the soluble salt concentration, CEC and corresponding base saturations need to be collected from representative, in-place refuse in six-inch increments to a depth of two feet, where possible. Contact the Department’s refuse cover chairperson to evaluate applicability to the application.*

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**Part 3. General Cover Variance Proposal Information** (62 Ill. Adm. Code 1816/1817.81, 1816/1817.83, 1816/1817.84)

1. Provide a general description of the nature of the cover variance request including depths of subsoil, topsoil, or best available materials and a justification that the proposed variance is the best available option for the relevant RDA.

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1. Provide an explanation and/or demonstration that the proposed variance will be as preventative of, or more preventative of acid mine drainage problems than 4 ft. of the best available, nontoxic, and noncombustible material.

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1. Based on the quality information of the refuse, discuss the proposed rate of neutralization material to be used as part of the cover variance request. Include calcium carbonate equivalent (CCE) analysis on a dry weight basis and proposed application rates. For guidance regarding required information, see Operator Memorandum No. 2020-02.

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1. Provide information regarding a proposed testing plan to verify compaction of a coarse refuse cap. If a coarse refuse compacted cap is not applicable, provide a justification.

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1. Provide information regarding the proposed side slopes of the RDA, if applicable, and discuss whether or not the proposed side slopes are different than that approved in the original permit.

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1. Provide information that justifies that the total depth of soil proposed in the cover variance request (including total soil cover placed on top of a geosynthetic cap) is of sufficient quantity and quality to support vegetative growth and to support the approved post-mining land use.

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1. Describe measures that will be implemented to ensure that the channel lining on all drainage conveyance structures for the applicable Refuse Disposal Facility will be stable with regards to the proposed soil cover.

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**Part 4. Hydrologic Specific Information** (62 Ill. Adm. Code 1780.21(f)/1784.14(f)

1. For proposals of less than 4ft. of soil cover, provide justification and data that groundwater will be protected by providing the following information:
	1. An evaluation of the current/existing groundwater quality including a description of groundwater flow direction.
	2. Provide this information for each aquifer that is monitored or has the potential to be impacted.

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1. For proposals of less than 4ft. of soil cover where a bottom/base liner (geosynthetic or compacted clay) is in place, a demonstration must be made that the infiltration rate into the RDA is less than the exfiltration rate through the base/bottom liner by providing the following information**:**
	1. An evaluation of the current/existing groundwater quality including a description of groundwater flow direction.
	2. Provide this information for each aquifer that is monitored or has the potential to be impacted.
	3. A model to show the impact of less than 4ft. of cover, or to show the equivalent geosynthetic cover will prevent infiltration (e.g. Hydrologic Evaluation of Landfill Performance (HELP)).

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1. Provide a demonstration that groundwater wells are adequately placed to determine all of the above information or provide a plan to install new wells or to conduct a hydrogeologic investigation.

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**Part 5. Slurry Wetland/Direct Slurry Revegetation Proposal Information** (62 Ill. Adm. Code 1816/1817.117)

1. Provide a longitudinal cross-section of the structure to demonstrate that the structure is fully incised. Depict the expected water level and discuss whether or not the water level is expected to fluctuate during the year.

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1. Provide a demonstration that the area will be suitable for a wetland post-mining land use as defined at 62 Ill. Adm. Code 1701.5 Appendix A.

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1. Provide a discussion that the bond release criteria for wetlands found at Section 1816.116/1817.117(a)(5) will be met. If amendments are proposed to facilitate direct revegetation of slurry, ensure Part 3 Question 3 is addressed.

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**Part 6. Geosynthetic Cover Liner Information** (62 Ill. Adm. Code 1816/1817.83(c)(4))

1. Provide manufacturer product specifications of the proposed geosynthetic cover liner and the depth of subsoil, topsoil, or best available material to be placed on top of the cover liner.

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1. Provide information describing how the integrity of a geosynthetic cover liner will be maintained when covering with earthen materials.

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1. Provide information demonstrating that soil cover placed on top of a geosynthetic cover liner will not slough or slide off of the out slopes of the RDA. Discuss how the soil cover will be adequate to prevent erosion and future exposure of the geosynthetic cover liner to UV light.

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