

TOWN OF SKOWHEGAN

Ordinance Entitled
Regulating Storage and Land Application
and Other Residuals
not generated by the Town of Skowhegan

Adopted Special Town Meeting
August 1, 1996

Title: This Ordinance shall be known and may be cited as the “Town of Skowhegan Sludge Management Ordinance.”

SECTION 1: Authority. This ordinance has been adopted pursuant to the Constitution of the State of Maine, Article VII, Part 2, and Maine Revised Statutes Annotated, Title 30-A, §3001.

SECTION 2: Findings and Purpose.

The Inhabitants of the Town of Skowhegan find as follows:

1. That sludge and residuals not generated by the Town of Skowhegan may contain concentrations of heavy metals, polychlorinated biphenyls and other substances which can be harmful to the health and safety of humans, animals, or aquatic life and the preservation and safety of the natural environment.

2. That the topography of the Town of Skowhegan, which includes Wesserunsett Stream, the Kennebec River, Lake George, Oak Pond, Smith Pond, Round Pond, wetlands, numerous brooks and tributaries, and significant groundwater aquifers, make it uniquely susceptible to environmental damage from runoff from areas where sludge and residuals have been spread posing a special danger to those water bodies and threatening the ecological and economic well-being of said Town.

3. The purpose of this ordinance is to protect the health and safety of the residents of the Town of Skowhegan, to enhance and maintain the quality of its environment, and to conserve natural resources through regulation of storage and land application of industrial wastewater treatment plant sludge and other residuals.

SECTION 3:Definitions.

3.01 Applicant: The term “applicant” refers to the owner and/or operator of the wastewater treatment plant or generator of the sludge or residual not generated by the town of Skowhegan.

3.02 Aquifer: See “significant groundwater aquifer”.

- 3.03 Board: The term “Board” refers to the Skowhegan Planning Board.
- 3.04 DEP: DEP refers to the State of Maine, Department of Environmental Protection and the Commissioner thereof, and /or its successor agencies.
- 3.05 EP Toxicity Test: The term “EP Toxicity Test” refers to the Extraction Procedure Toxicity Test as described in Section 1.2.4 of the U.S. Environmental Protection Agency (EPA) document entitled Test Methods for Evaluating Solid Waste, SW 846 (Nov. 1986).
- 3.06 Operator: The term “operator” refers to any person who has care, charge, or control of a land site or storage facility site subject to this Ordinance. This person may be the owner, an agent, a lessee of the owner, or an independent contractor.
- 3.07 Owner: The term “owner” refers to any person who, alone or in conjunction with others, owns the real property upon which is located a land site or storage facility site subject to this Ordinance.
- 3.08 Primary sand and gravel recharge areas: The term “primary sand and gravel recharge areas” refers to the surface directly overlying sand and gravel formations that provide direction replenishment of the ground water in sand and gravel and fractured bedrock aquifers. The term does not include areas overlying formations that have been identified as unsaturated and are not contiguous with saturated formations.
- 3.09 Residual(s): The term “residual(s)” refers to pulp and paper mill wastewater treatment plant sludge, resultant ash from incineration of sludge and wood generated from commercial or industrial facilities and all materials containing same and available as potentially suitable materials for controlled land application resulting in vegetative assimilation, attenuation of the components in the material, or improved soil conditions.
- 3.10 Selectmen: The term “Selectmen” refers to the Skowhegan Board of Selectmen.
- 3.11 Significant groundwater aquifer: The term “significant groundwater aquifer” refers to any formation of soil or fractured bedrock that contains significant recoverable quantities of water (greater than ten gallons per minute from a properly constructed six-inch diameter well). NOTE: reference may be made to the “Hydrogeologic Data For Significant Sand and Gravel Aquifers” map prepared by the Maine Geologic Survey. In the event that on-site testing required pursuant to this Ordinance identifies additional aquifers or identifies boundaries of aquifers that are different from those mapped, the results of the on-site testing shall control.

- 3.12 Sludge: The term “sludge” refers to the solid, semi-solid or liquid residual generated by a municipal, commercial, or industrial wastewater treatment plant and all materials containing same.
- 3.13 Temporary Field Stacking: The term “temporary field stacking” refers to short-term stacking of materials for not longer than a period of seventy- two (72) hours before spreading is scheduled to occur.

SECTION 4: Application For Permit.

4.01 Application Procedure.

4.01.01 An applicant wishing to deliver, store, or spread sludge or residual(s) in the Town of Skowhegan shall file an application form with the Board. The application shall be submitted at least 120 days before the date of first delivery, storage, or spreading to ensure adequate time for review under this Ordinance.

4.01.02 The applicant shall submit ten (10) copies of the application at least thirty (30) days prior to the Board meeting at which the applicant requests to be heard.

4.01.03 The application shall be accompanied by a non-refundable fee of Fifteen Hundred Dollars (\$1,500.00) in the form of a bank or certified check payable to the Town of Skowhegan, Maine, with a notation thereon stating the specific purpose of the fee.

4.01.04 The Board shall require the applicant to deposit an amount not to exceed Twenty-five Thousand Dollars (\$25,000.00) in an interest-bearing account in the name of the Town of Skowhegan at a financial institution having an office in the Town of Skowhegan using the social security number or the federal identification number of the applicant. The purpose of this account shall be to allow the Town to hire a professional consultant to review the application for compliance with this Ordinance and to conduct such additional studies as may be required to assure that the public health, safety, and natural environment will not be adversely impacted by the proposed spreading or storage of sludge and/or residual(s). Funds shall be withdrawn from this account by the Treasurer of the Town only at the Selectmen’s request. Any interest earned and any remaining balance in this account shall be returned to the applicant following approval or denial of the application.

4.01.05 At the meeting at which it is first considered, the Board shall review the application to determine whether it is complete or whether additional submissions are required. If the application is found to be incomplete, the Board shall notify the applicant in writing within ten (10) days of the meeting stating what additional submissions are necessary to begin the review process.

4.01.06 The applicant shall provide any additional information within thirty (30) days from the date on which the Board gives notice that additional information is required.

4.01.07 The application shall be considered “complete” and “filed” on the date when all required information is furnished to the Board by the applicant.

4.01.08 A public hearing shall be held within thirty (30) days from the date when the application is complete. The Board shall cause notice of the time, place, and date of such hearing to be sent by certified mail, return receipt requested, not less than ten (10) days before the date of the public hearing to the applicant, to abutters of the properties involved, and to owner(s) of any property within 1,000 feet of the properties involved. Owners of abutting properties and of properties within 1,000 feet shall be those listed in the current real property tax records of the Town of Skowhegan. Notice shall also be published at least seven (7) days prior to the public hearing in a newspaper of general circulation in the Town of Skowhegan. Notice shall also be posted in three (3) public places designated by the Board. Failure to receive notice shall not invalidate a public hearing held, if the requirements of this subsection have been met.

4.01.09 The Board shall recommend to the Selectmen whether the application should be approved, approved with conditions, or denied. The Selectmen shall take final action within thirty (30) days of the issuance of a license from DEP, or within sixty (60) days of the public hearing, whichever date is later. Final action by the Selectmen may be approval, approval with condition (s), or denial.

4.01.10 If the applicant is denied a license by DEP, no action shall be required by the Board. The applicant shall send or deliver a copy of the DEP approval or denial to the Board within three (3) days of receiving it.

4.01.11 Within seven (7) days of its final action, the Selectmen shall notify the applicant of its action and the reason(s) for such action. Approval of the

application, together with the conditions of approval, if any, shall constitute a permit.

4.02 **Submissions.** An application to spread sludge or residual (s) not generated by the Town of Skowhegan shall include the following:

4.02.01 A complete “Application for Sludge Utilization” prepared for DEP.

4.02.02 A fee as required by 4.01.03 of this Ordinance and a deposit into an interest-bearing account as required by 4.01.04.

4.02.03 A map of the proposed site that clearly indicates property lines, abutters, owners of property within 1,000 feet, existing water well locations within 1,000 feet, areas not suitable for spreading and the reason(s) therefore, required setbacks and the reason(s) therefore, storage areas, and proximity to any primary sand and gravel recharge area and/or significant groundwater aquifer.

4.02.04 A baseline soils analysis for each site. This analysis shall be conducted in the manner recommended by the Natural Resource Conservation Service for soils testing generally and shall include testing as required by Appendix A of this Ordinance.

4.02.05 A Hydrogeologic analysis conducted by a certified geologist or registered professional engineer qualified by education and experience to conduct a hydrogeologic analysis. This analysis shall be sufficient to determine that the application of sludge or residual (s) to the proposed site will meet the performance standards set forth in SECTION 5 of this Ordinance and shall include, but not be limited to, the following:

- a. A site-specific geologic literature search.
- b. Aerial photo interpretation, including a photolineament analysis, to identify potential high-yield aquifers.
- b. Documentation of type, depth, yield, static water level, and length of casing of any water wells within 1,000 feet of a proposed spreading site.
- c. Reconnaissance field mapping by a certified geologist of the surficial and bedrock geology of the proposed site and all areas within 1,000 feet, which field mapping shall relate any observed bedrock outcrop fracture orientation and spacing data to the photolineament analysis.

- d. Documentation of the Hydrogeologic setting of the project site, including, but not limited to, a general description of the depth and expected seasonal variations in the depth to the first ground water table encountered below ground surface, a description of the general direction of ground water flow up to the point where discharge to surface water occurs, a description of the relationship of the site to any significant aquifers (those producing over ten (10) gallons per minute to a properly constructed six-inch diameter water well) including bedrock aquifers or inferred bedrock aquifers.
- e. A description of the background ground water quality at the up gradient and down gradient edges of the proposed site. This description shall include background levels for any constituent regulated by this Ordinance as set forth in Appendix A.
- f. A proposed ground water monitoring plan to be used just prior to and for two years following the application of the sludge and /or ash, including the proposed horizontal and vertical placement of monitoring wells and all domestic wells within 1,000 feet monitored, frequency of monitoring, and precision of measurement for each parameter to be measured.

4.02.06 A plan for the independent weekly analysis (per the schedule required in 5.02.02 a. of the sludge or residual (s) required by Appendix A of this Ordinance). Sampling and analysis shall be performed by a State-certified laboratory chosen by the Board in accordance with the DEP document entitled, Methodology for Sampling and Analysis of PCDD's and PCDF's in Sludge and Residuals, and shall be performed on all sludge or residual(s) without regard to source.

4.02.07 A plan for the submission of the results of the tests required in subsection b. and c. of 5.02.02 of this Ordinance.

4.02.08 A plan for the submission of the results of soil tests to be performed just prior to and twice yearly following the application of sludge or residual(s) for the duration of the permit sought, including the proposed sampling schedule, sampling locations, and parameters to be measured.

4.02.09 The Board may require such other information as it deems necessary.

SECTION 5: Performance Standards

5.01 General Standards.

5.01.01 Storage and land application of sludge and residual (s) not generated by the Town of Skowhegan is prohibited, unless approval has first been obtained from the Board, the Selectmen and from DEP.

5.01.02 No sludge or residual (s) not generated by the Town of Skowhegan may be stored on site in the Town of Skowhegan except in a permanent storage facility as provided in DEP Regulations Chapter 567 B-4. c. There shall be no winter field stacking of sludge or residual (s) not generated by the Town of Skowhegan. Stacking on each site shall be limited to the amount approved for use on such site.

5.01.03 If temporary field stacking is to occur , reasonable precautions must be taken to prevent leaching and/or dispersal of sludge or residual (s) into the air.

5.01.04 Spreading of sludge or residual (s) shall be allowed only from May 15 to November 15 in any year. Spreading of sludge or residual (s) shall not be allowed, if it is raining or, if the ground is saturated, frozen or snow covered.

5.02 Testing Requirements. Subject to the approval of the application by DEP, the Board shall recommend for approval, or conditional approval, an application for spreading of sludge or residual (s) on land or storage for the purpose of spreading sludge or residual (s), if the applicant agrees to comply with any additional testing required by the Board of Selectmen, including but not limited to the following:

5.02.01 Site Testing and Monitoring

- a. **Soils Analysis:** The applicant shall furnish a baseline soils analysis as required in 4.02.04 and soils testing program in accordance with 4.02.08 of this Ordinance with the initial application to the Board.
- b. **Water Analysis:** The Applicant shall install at least two monitoring wells on each site, the number and location of said wells to be determined by a Board-appointed certified geologist or registered professional engineer qualified by education and experience to make that determination. The water in these wells shall be tested quarterly for parameters to be approved by the Board based on the actual constituents of the sludge or residual (s). At the discretion of the Planning Board or at the request of the owner of an existing well located within one-thousand (1,000) feet of any site proposed for storage or spreading of sludge or residual (s) not generated by the Town of Skowhegan, the Board may require baseline and annual water analysis of any well, as required by Appendix A of this Ordinance.

5.02.02 Characteristics of Sludge or Residual (s) Not Generated By Town of Skowhegan

- a. The Board shall provide for the supervision of an independent random weekly sample of sludge or residual (s) taken at the point of generation after the product has gone through all processing steps necessary prior to delivery. All testing shall be in accordance with the sixteenth edition of Standard Methods for Examination of Water and Wastewater (1985), published by the American Public Health Association, and the results shall be furnished to the Code Enforcement Officer for the Town of Skowhegan and/or the Board on a schedule approved by the Board.
- b. Sludge or residual (s) not generated by the Town of Skowhegan shall be tested for pollutants as required by DEP and as required by this Ordinance. In addition to the above requirements, the Board or its agent shall take a representative composite sample of the actual product delivered to Skowhegan and test by the “EP Toxicity Test”, as required by Appendix A of this Ordinance.
- c. Sludge or residual (s) not generated by the Town of Skowhegan shall not be delivered to, stored or spread in the Town of Skowhegan, if testing required by this Ordinance indicates that concentrations of heavy metals, organic compounds, or other pollutants exceed the maximum permissible concentrations and/or loading limits appearing in the DEP Regulations at Chapter 567 B-1.b.

5.02.03 Hydrogeologic Criteria.

- a. Sludge or residual (s) shall not be delivered to, stored, or spread on land with a slope of greater than fifteen percent (15%).
- b. Where the proposed application site has a slope of fifteen percent (15%) or less, sludge or residual (s) shall not be delivered to, stored, or spread within the following setback areas:
 - (1) Residences; classified bodies of water including lakes, ponds, and streams; water supply wells.....300'
 - (2) Intermittent streams.....100'

(3) Public Roadways, drainage gullies, property boundaries..50'

Additional setback requirements established by DEP Regulations at Chapter 567 B - 2.b and B - 4.a. must also be met.

- c. Notwithstanding the provisions of subsection “b” of this section with respect to water supply wells, no sludge or residual(s) containing human pathogens may be delivered to, stored, or spread on a site closer than a two hundred (200) day hydraulic ground water travel time from the nearest water well used for drinking water purposes.
- d. Sludge or residual(s) shall not be delivered to, stored, or spread over a significant groundwater aquifer, over a primary sand and gravel recharge area, or within the recharge area of a public water supply well.
- e. Sludge or residual (s) shall not cause the State of Maine Primary Drinking Water Standards or the National Primary Drinking Water Regulations, which are incorporated herein by reference, to be exceeded in the ground water at a distance greater than one hundred (100) feet from the edge of the sludge or residual (s) spreading boundary, or at the property line, if it is within one hundred (100) feet of the sludge or residual (s) spreading boundary, taking into account existing background ground water quality under the site. The burden shall be on the applicant to show that the spreading of sludge or other residual (s) will not cause these standards to be exceeded.

1.02.04 Aquatic Impact Criteria

The spreading of sludge or residual(s) shall not cause the National Water Quality Criteria (freshwater chronic criteria), established by the U.S. Environmental Protection Agency (EPA) to protect aquatic organisms, to be exceeded in classified water bodies that will receive runoff from the site of spreading of sludge or residual (s), taking in account the existing quality of those classified water bodies. The freshwater chronic criteria appear in full in the “Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses,” published in the EPA document Quality Criteria for Water 1989, EPA 440/5-86-001. The burden shall be on the applicant to establish that the spreading of sludge and other residual (s) will not cause these criteria to be exceeded.

5.03 Additional Requirements. The Board shall not recommend approval of an application for the spreading of sludge or residual(s) on land or the storage of sludge or residual(s) for the purpose of spreading on land, unless:

5.03.01 The applicant agrees in writing to furnish the Code Enforcement Officer for the Town of Skowhegan with copies of all conditions and limitations imposed by DEP, and twenty four (24) hour advanced notice of any changes in the composition of the sludge or residual(s), and further testing required by the DEP and the results of those tests, and any annual variations in site spreading or storage plans.

5.03.02 The applicant agrees in writing to notify the Code Enforcement Officer for the Town of Skowhegan of delivery of any sludge or residual (s) not generated by the Town of Skowhegan, to advise said Code Enforcement Officer of the proposed spreading timetable, and the identity of the person who is to do the actual spreading. The person spreading the sludge or residual (s) shall notify said Code Enforcement Officer as soon as possible prior to the actual spreading, and in any event not later than three (3) days prior to spreading.

5.03.03 The applicant has provided the landowner and the Town with a written statement indicating that the applicant has agreed or will agree to indemnify the owner for any damages which may result from the spreading of sludge or residual(s) not generated by the Town of Skowhegan.

5.03.04 The applicant has entered into a written conditional buy/sell agreement with the owner establishing a fair market value price for the land involved in the spreading of sludge or residual(s) or the storage of sludge or residual(s) for spreading on land and agreeing to purchase the land at that price should damage to the land occur from such spreading and/or storage of sludge or residual(s).

5.03.05 The applicant agrees in writing to be financially responsible should the storage or spreading of sludge or residual(s) prove hazardous to the health and safety of the residents, wildlife, soil, water, and/or air quality of the Town of Skowhegan.

5.03.06 The applicant agrees in writing to provide a fence or other barrier suitable to prevent access to the sludge or residual(s) spreading site by animals and unauthorized individuals.

SECTION 6: Duration of Permit: Review Process

6.01 A permit issued under this Ordinance shall be valid for a period of five (5) years from the date of issuance and shall be subject to annual review by the Board and the Selectmen.

6.02 At least fourteen (14) days prior to annual review, but not more than thirty (30) days prior thereto, the Board shall notify the applicant of the review.

6.03 As part of the annual review, the applicant shall submit the following information to the Board in writing.

6.03.01 The names of the applicant and the landowner and the date of the original permit.

6.03.02 A narrative describing the following:

- a. The quantity of sludge or residual (s) applied the previous year and the number of acres utilized.
- b. Any problems encountered the previous year.
- c. Any proposed changes in the upcoming year.
(NOTE: new acreage requires a new application).
- d. Any physical or chemical changes in the sludge or residual (s).
- e. A sludge or residual (s) analysis as required in the initial application.
- f. A soil Ph for each land acre to which the sludge or residual (s) was applied.
- g. The results of the quarterly water analysis required under 5.02.01 b. of this Ordinance.
- h. Such other analysis as DEP, Board or Selectmen required in the initial approval.

6.04 The applicant shall submit a non-refundable annual renewal fee of One Thousand Dollars (\$1,000.00).

6.05 If the Board determines that the conditions of the permit were met for the previous year, the Board shall recommend that the permit continue in effect until the next annual review. The Board may, in its discretion, modify or revoke the permit, if actions by the applicant or the operator were in violation of this Ordinance, or if the Board finds that continuation of the permit is harmful to the health and safety of humans, animals, or aquatic life and the preservation and safety of the natural environment.

6.06 Any person applying or storing sludge or residual (s) not generated by the Town of Skowhegan within the municipal boundaries at the time of the enactment of this Ordinance pursuant to a license issued by DEP may continue to do so for sixty (60) days from the enactment of this Ordinance. By the sixty-first day following the enactment of this Ordinance, any such person shall submit an application to the Board as required by this Ordinance prior to continuance of the application or storage activity.

SECTION 7: Modification of Conditions and Revocation of Permit.

If at any time, as a result of any testing required by DEP, this Ordinance, or the Board, elements or compounds are found in quantities which may be harmful to the health and safety of humans, animals, or aquatic life and the preservation and safety of the natural environment, the Board may require additional testing at the applicant's expense and may modify the conditions applicable to any permit. If the Board as a result of any required testing or risk assessment determines that continued storage or spreading of sludge or residual(s) not generated by the Town of Skowhegan is harmful to the health and safety of humans, animal, or aquatic life and the preservation and safety of the natural environment, then it may recommend to the Selectmen such appropriate action as it deems necessary, including limitation, modifications, or suspension or revocation of any permit.

SECTION 8: Enforcement and Penalty

8.01 The Code Enforcement Officer for the Town of Skowhegan shall have the right to enter all land application and storage sites at all reasonable hours for the purpose of inspecting the site for compliance with this Ordinance.

8.02 If the Code Enforcement Officer finds violations of any permit conditions or of any obligations imposed by the Ordinance or Chapter 567 of DEP Regulations, the Code Enforcement Officer shall issue a written notice to the landowner, the Board, the applicant, the operator (if different from the landowner) and notify DEP.

8.03 The Board, upon finding the provisions of the Ordinance or conditions of approval are being or have been violated, may recommend that the Selectmen temporarily suspend the permit and the Selectmen may revoke the permit after notice and hearing. The Selectmen may take any other action deemed necessary, including prosecution of the code violation pursuant to Rule 80K of the Maine Rules of Civil Procedure.

8.04 The applicant and/or operator who violates the Ordinance or the conditions of approval, as well as the owner who knowingly permits such violations to occur, shall be guilty of a civil violation and shall be subject to a civil penalty of not less than Five Hundred Dollars (\$500.00) nor more than Five

Thousand Dollars (\$5,000.00) for each offense. Each day such violation is permitted to exist after notification shall constitute a separate offense.

SECTION 9: Appeals

An aggrieved party may appeal any final action taken by the Selectmen to the Superior Court pursuant to Rule 80D of the Maine Rules Of Civil Procedure.

SECTION 10: Validity, Severability, and Conflict with Other Ordinances

10.01 Should any section or provision of this Ordinance be declared by a court of competent jurisdiction to be invalid, such decision shall not invalidate any other section of this Ordinance.

10.02 Whenever the requirements of this Ordinance are inconsistent with the requirements of any other Ordinance, code or statute, the more restrictive requirements shall apply.

SECTION 11: Amendments

This Ordinance may be amended by a vote of the Town Meeting, the Legislative Body of the Town of Skowhegan. Amendments may be initiated by a request of the Planning Board, the Selectmen, or by petitions bearing the signatures of registered voters in the Town of Skowhegan equal to, or in excess of , ten percent (10%) of the votes cast by said voters in the last gubernatorial election.

APPENDIX A

TESTING PARAMETERS

1. All Soil, Water, Sludge, and Other Residual Tests shall include pH, Magnesium, Potassium, Phosphorous, Boron, Arsenic, Chloride, Selenium, Fluoride, Sulfate, Aluminum, Sodium, Cadmium, Copper, Nickel, Lead, Vanadium, Zinc, Silver, Barium, Calcium, Iron, Mercury, Manganese, Molybdenum, Nitrate, Nitrite, Ammonium, Total Kjeldahl N., Polychlorinated Dibenzofurans (PCDF's), Polychlorinated Biphenyls (PBC's), Total Organic Halogens (TOX), Polychlorinated Dibenzopyrans, (All Dioxin Cogeners), Chromium (metallic, hexavalent, trivalent).

2. Soil Tests shall also include cation exchange capacity, crop recommendations, texture separate analysis, and percent organic matter.
3. Water Tests shall include color and turbidity.
4. Sludge and Other Residuals Tests shall include the percent of components present in the test results of paragraph one (1) of this Appendix A. The percent of loss on ignition shall also be included.