

## Chapter 603 – Landfill

### Section 603.1 – Title

This Ordinance shall be known and cited and referred to as the “Lenox Township Landfill Ordinance.”

### Section 603.2 – Intent

The purpose of this ordinance is to provide for the use of lands as solid waste disposal areas and to regulate and control said use for the preservation of public health, safety, and welfare for the protection of natural resources. To further these purposes, it is deemed necessary that disposal area activities be regulated, that standards and operating requirements be established, that a permitting process be provided, and that administration of this ordinance and penalties for violation of this ordinance be provided. Disposal areas are considered by the Township to be a temporary use of land only; therefore, it shall be the further intent of these provisions that such operations shall be conducive to and result in the reclamation of the land. other purposes. The requirements of this ordinance shall be in addition to the requirements of Act 641 of the Michigan Public Acts of 1979, as amended, and all regulations promulgated pursuant to the authority of said. Act, which Act, and regulations shall be considered minimum standards to be met by any owner and/or operator of a disposal area.

### Section 603.3 – Definitions

**Ashes** – The residue from the burning of wood, coal, coke, refuse, waste- water sludge, or other combustible materials.

**Board** – The Lenox Township Board.

**Cell** – Compacted solid waste completely enveloped by a daily cover material.

**Disposal Area** – A solid waste transfer facility, incinerator, sanitary landfill, processing plant, or another solid waste handling or disposal facility utilized in the disposal of solid waste.

**Garbage** – Rejected food waste including waste accumulation of animal, fruit, or vegetable matter used or intended for food that attends the preparation, use, cooking, dealing in, or storing of meat, fish, fowl, fruit, or vegetable.

**Ground Water** – Any water found below the surface of the earth.

**Hazardous Waste** – Any water managed under Act 64 of the Michigan Public Acts of 1979.

**Inert Materials** – Substances that will not decompose, dissolve, or in any way form contaminated leachate upon contact with water or other liquids percolating through them when disposed of on land.

**Leachate** – Liquid that has passed through or emerged from solid waste and contains soluble, suspended, or miscible materials removed from the waste.

**Lift** – A layer of cells covering a designated area of a sanitary landfill.

**Person** – An individual, sole proprietorship, partnership, association, or corporation, public or private, association, institution, cooperative enterprise, municipality, commission, political subdivision, or other duly established legal entity.

**Rubbish** – Nonputrescible solid waste, excluding ashes, consisting of both combustible and noncombustible waste, including paper, cardboard, metal containers, yard clippings, wood, glass, bedding, crockery, demolished building materials, or litter of any kind, and other similar materials.

**Sewage** – Water carried human or animal wastes from septic tanks, water closets, residences, buildings, industrial and municipal establishments, or other places, together with such groundwater infiltration, subsurface water, mixtures of industrial wastes, or other wastes as may be present.

**Solid Waste** – Garbage, rubbish, ashes, incinerator ash, incinerator residue, street cleanings, municipal and industrial sledges, solid commercial and solid industrial waste, liquid, or other waste regulated by statute, ferrous or nonferrous scrap directed to a scrap metal processor or to a re-user of ferrous or nonferrous products and slag or slag products directed to a slag processor or to a re-user of slag or slag products.

**Surface Waters** – A body of water whose top surface is exposed to the atmosphere and includes a flowing body, a pond, or a lake, except for drainage ways or ponds used solely for wastewater conveyance, treatment, or control.

**Wetland** – Those areas are defined as wetlands in Act No. 203 of the Public Acts of 1979, being s281.701, et seq. of the Michigan Compiled Laws.

## **Section 603.4 – Administration**

A. The Board is hereby granted authority under this Ordinance as a “Board” of the Township to entertain applications, hold Public Hearings, grant permits, and do all other acts authorized herein and in the Township Zoning Ordinance.

B. Enforcement:

1. Agency – This Ordinance shall be enforced by the Building Department for the Township of Lenox and/or the Ordinance Enforcement Officer appointed by the Township Board.
2. Inspections – By accepting a permit issued under this Ordinance, an operator of any disposal area shall be presumed to have consented to inspections of the property as described in Section 603.7 of this Ordinance.
3. Authority to Issue Appearance Tickets – The Township Building Inspector and his representatives, and/or Enforcement Officers, shall have the authority to issue Appearance Tickets.

C. Permit Requirement Established:

From and after the effective date of this Ordinance, no person shall operate a disposal area in Lenox Township except in accordance with a permit issued by the Board, pursuant to the authority of this Ordinance. No permit under this Ordinance shall be required:

1. For excavations for the construction of buildings and structures for which a building permit has been issued.
2. For the moving, grading, or leveling of earth or rock materials by a property owner solely upon his property and not moved to other property.
3. For the filling of land for the need of fill so long as the fill does not contain any refuse is not a commercial operation, and not more than two (2) acres are involved on any given site.
4. For the removal of soil when no more than twenty (20) cubic yards are removed in any calendar year.
5. For the installation of public utilities.

D. Permit Issuance Procedure:

1. Application – An applicant shall submit to the Board an application containing the following information:
  - a. Full names and addresses of all parties with an interest in said premises setting forth their legal interest and a list of any encumbrances on said property. Proof of said legal interest shall be provided.
  - b. A detailed and full legal description of the premises wherein the operations are proposed shall be provided.
  - c. Topographical survey map at a scale of one (1) inch equals one hundred (100) feet, showing existing and proposed grades on a two (2) foot contour interval. Said grades shall be prepared and sealed by a Civil Engineer or Land Surveyor, registered as such by the State of Michigan.
  - d. A statement and calculations by a Registered Civil Engineer or Land Surveyor as to the cubic yards of the fill material to be deposited and a detailed statement and engineering plan as to how the filling is to be accomplished.
  - e. Detailed engineering plan which identifies all types of materials to be filled, an indication of specific places, a detailed statement as to the methods of operation, the type of machinery or equipment to be used, and the estimated period of time that such operations shall cover.
  - f. Statement of similar operations carried on by the applicant, including location by the municipality.
  - g. The type and a daily number of vehicles to be used in the proposed operations.
  - h. Identification of access roads, onsite roads, a drainage plan that identifies grades for proper drainage and any special draining devices, if necessary, fencing, and structures on-site existing and proposed utilities, and any explanation of any onsite testing or another reliable survey date, including soil surveys, water tables, and subsurface characteristics.
  - i. Presentation of an Impact Statement which includes an evaluation of the social and ecological environment in and around the site.
- E. Impact Statement Requirements: An Impact Statement must be addressed as well as any other characteristics unique to the site area:

1. Impact on the Natural Environment

- a. Inventory and describe the existing vegetation and wildlife found on the site. To what extent will they be permanently impaired or eliminated as a result of the proposed operations?
- b. Will the proposed operations alter the existing drainage patterns of the area surrounding the site?
- c. What effect will the operation have on the quantity of groundwater in the area? What steps will be taken to protect wells on adjacent property?
- d. How will the proposed operations affect air quality in the surrounding area, particularly regarding dust?
- e. What noise levels will result from the proposed operations, and what steps will be taken to limit noise to an acceptable level?
- f. What natural features, such as unique topography, mature trees, streams, marshlands, swamps, and similar, will be destroyed or adversely affected by the proposed operations?
- g. How will the proposed operations affect soil stability in the area?
- h. Are there potential historical or archaeological characteristics that may be destroyed?
- i. Identify flood plains and the one hundred (100) year flood elevation.

2. Impact on the Social Environment

- a. How will the proposed disposal operation affect the physical and cultural attractiveness of the surrounding area?
- b. What impact will the proposal have on landmarks and aesthetic views in the area?
- c. Will the proposed operations create a nuisance for residents in the area?
- d. What impact will the proposal have on neighborhood character and privacy in the area?
- e. How will the operation affect property values and the quality of housing in the adjoining areas?

3. Economic Impact

- a. Will the proposal increase employment in the Township or the County?
- b. How does the petitioner's past performance indicate financial stability and ensure completion of the proposed project?
- c. Will the proposed operations impair the economic growth of any existing land uses?
- d. Will the proposed operations impair the usefulness of adjoining properties?

4. Public Service Impact

- a. What additional public services, such as police and fire protection, will be required as a result of the proposal?
- b. What impact will the proposal have on local tax revenues?
- c. Will the proposal significantly increase traffic congestion in the area?
- d. What effect will the truck traffic have on road conditions over the proposed haul route?
- e. Will the proposed haul route impact any other municipalities other than Lenox Township?

5. The above-required information is to be provided in sufficient detail to allow the township to evaluate the potential impact of the proposed operations systematically and thoroughly on the surrounding area of the community.

6. Statement and Site Plan for Future Use: A statement and site plan which specifies in detail the proposed use of the land after the excavation or filling. The final grades presented shall be consistent with the purposes for the property after completion of the operation.

G. Application Attachments: Applications for a permit to operate a landfill, solid waste processing or disposal facility, or areas also shall contain or be accompanied by the following information:

1. Design plans prepared by a Civil Engineer and bearing the signature and seal of a professional engineer registered in the State of Michigan.

2. Background data, including the following:
  - a. Present and estimated future contributory populations or sources for the life of the system.
  - b. Estimated per capita daily domestic waste quantities in weight and volume.
  - c. Anticipated weight and volume of other wastes including, but not limited to, industrial, agricultural, and demolition wastes and street cleanings.
  - d. Ratio of the maximum daily volume anticipated to the average daily volume anticipated.
3. Maps, in the number prescribed by the Township, drawn to the scale of one hundred (100) feet equals one inch or larger and with two (2) foot contour intervals. Maps shall include as a minimum the following information:
  - a. Property boundaries and boundaries of areas to be filled. Also, show boundaries of all continuous properties and names of owners.
  - b. Access road location.
  - c. Proposed traffic patterns.
  - d. Location of fencing.
  - e. Location of weighing facilities, if applicable.
  - f. Location of existing and proposed utilities.
  - g. Indication of use of adjoining land and buildings.
  - h. Borrow and soil storage areas.
  - i. Location of public and private water supplies, wells, springs, swamps, or other bodies of water within one-half (1/2) mile of the proposed landfill site property lines.
  - j. Location of gas and wells.
  - k. Location of high-tension power line rights of way.

- I. Location of fuel transmission pipeline rights of way.
- m. Location of mining operations within one-half (1/2) of a mile of property lines of the proposed landfill.
- 1. A plan of operations shall be written and submitted which is specific as to areas to be filled, schedule of filling, site preparations, source, and types of materials to be used as cover.
- 2. The plan should include details relative to:
  - a. Compaction of solid wastes.
  - b. Application of daily cover material.
  - c. Elevation and grade of the final cover.
  - d. Linear construction.
  - e. Leachate collection treatment and recirculation or disposal.
  - f. Management of groundwater.
  - g. Management of surface water.
  - h. Erosion control.
  - i. Re-vegetation procedures to be used.
  - j. Typical cross-sections of lifts, dimensions, and elevations of the base lifts.
  - k. Grades required for proper drainage of lifts.
  - l. Decomposition gas control measures.
- I. Hydrogeologic Investigation and Report: A hydrogeologic report and monitoring program which follows the current standards of the State of Michigan, and its agencies shall be provided.
- J. Supplemental Information: Such other information and material as the Board shall require.

## **Section 603.5 – Fees, Referral, Bonds, and Insurance**

- A. Fees and/or Costs: An applicant for a permit shall deposit such fees and/or costs as are required by the resolution of the Township Board.
- B. Public Hearing and Referral to Planning Commission: Before granting a permit for any property, or additional area of the property, not previously under a permit, the Board shall hold a Public Hearing and shall either before or after the Public Hearing refer the application to the Township Planning Commission for findings and recommendations as to whether the granting of the permit as proposed would:
  - 1. Permanently impair the intended land use potential of the property in question.
  - 2. Detrimentally affect the adjoining properties.
  - 3. Be consistent with the planning and zoning of the area where the proposed operation is to be located.
- C. Basis for Issuance: The Board shall authorize the issuance of a permit only if it finds:
  - 1. That the proposed activities will not be injurious to the public health, safety, and welfare of the Township and its residents and will not pollute, impair, or destroy natural resources.
  - 2. That there has been compliance with all the requirements and standards of this Ordinance, the other applicable codes and ordinances of the Township, and state statutes and regulations.
  - 3. The proposed activity will not create an unreasonable hazard, annoyance, inconvenience or nuisance to the owners or occupants of nearby property.
  - 4. That the proposed activity will not significantly change the character of the neighborhood or unreasonably reduce the value of nearby property.
  - 5. That the proposed activity will not create any significant obstacle to the implementation of the Zoning Plan as evidenced by the Master Plan of the Township.
- D. Duration, Expiration, and Renewal: The Board shall issue a permit for a period of up to one (1) year, renewable annually for a year or less by the Board without further Public Hearing.
- E. Conditions:

1. Necessity – The Board may attach such conditions to the granting of the permit under this Section which it may find necessary to ensure that the intent and purpose of this Ordinance is in all respects observed.
2. Violation – Any violation of a condition(s) included in the permit shall be construed as a violation of this Ordinance and shall be grounds for revoking the permit.

F. Revocation:

1. Notice of Violation - The Board may, at its discretion, notify the owner and/or operator of any violation of the Permit and/or this ordinance.
2. Failure to Abate Violation - Upon failure of the owner and/or operator to abate said violation within five (5) days after mailing or delivery of the said notice, said may be summarily closed, and the Permit therefore suspended or revoked, and the resort had to the bond for restoration.
3. Hearing Request - Any owner and/or operator aggrieved of any notice sent pursuant to this subsection, may request us in writing and delivered it to the Township. The request shall set forth why the operation site should not be summarily closed, the permit suspended or revoked, and the resort had to the bond.
4. Action pending Hearing – In any case, if the Board determines the operation of the excavation or landfill would be detrimental to the health and/or safety of persons and/or property, the Board may summarily, and without five (5) days' notice, suspend or revoke the permit but shall grant a hearing upon request as provided herein.
5. Hearing – If a request for a hearing is received, the Board shall hold a hearing within seven (7) days and may after the hearing continue the suspension or revocation of the permit or take such other action as appears appropriate under the circumstances.

G. Excavation or Landfill Changes: The permittee shall submit a written request to the Board for approval of changes to the original plans, specifications, reports, and methods of operation submitted with a permit application. No such change shall be initiated until the written approval of the Board has been obtained.

H. Performance Bond:

1. Requirement Established - The applicant shall post a performance bond in the form of cash, a bank letter of credit, or, at the discretion of the Board, a surety bond, or some other security satisfactory to the Board, naming the Township of Lenox as

the Beneficiary thereof, in any amount determined by the Board to be reasonably necessary to ensure compliance hereunder.

2. Conditions of Bond:

- a. Guarantee Compliance – Bonds shall guarantee compliance with this Ordinance, the permit requirements, and conditions and that the operation will be carried out according to the approved plans and specifications.
- b. Guarantee Landfill Work Performance – In the case of a landfill, it shall further guarantee the performance of work needed to avoid harmful movement of gasses or contamination to the ground or surface water and/or the environment during operations and for ten (10) years after the completion of the landfill.
- c. Forfeiture of Bond – Upon failure of timely compliance with the requirements of the bond guarantees the Township may use the bond proceeds to the extent necessary to accomplish such requirements.

I. Non-compliance Enforcement: The filing of an application will be deemed to grant a license to the Township and its agents to go upon property under permitted to use the bond proceeds for the purposes allowed by the bond, where there has been non-compliance.

J. Establishing Amount:

1. Considerations – In fixing the amount of such bond, the Board shall take into account:
  - a. The size and scope of the proposed operation.
  - b. Current prevailing cost of rehabilitation and restoring the premises upon default of the operator and the Board may rely upon the advice of experts, including engineers, in establishing the cost as well as the supported opinions of engineers or other experts provided by the applicant.
  - c. Other such conditions and factors might be relevant in determining the sum reasonable considering all facts and circumstances surrounding each application.
2. Minimum Amount – In no case will the sum of the performance bond be less than five hundred dollars (\$500.00) for each acre of land or fraction thereof to be covered by the permit.

K. Notice of Lapse: The applicant shall provide proof that the Township will be notified in the event of any lapse in the effectiveness of the bond.

L. Reduction of Bond: For each acre restored and reclaimed in accordance herewith, or otherwise, said bond may be reduced pro-rata as determined by the Board.

M. General Comprehensive Liability Insurance:

1. Requirement Established - The applicant shall secure and file with the Township Clerk certifications of proof of insurance, insuring the Applicant, his employees and/or agents or representatives, and the Township for general comprehensive liability in an amount of at least one hundred thousand dollars (\$100,000.00) per person and three hundred thousand dollars (\$300,000.00) per occurrences.
2. Notice of Discontinuance – The certifications or renewals thereof shall provide that the Township shall be notified upon discontinuance or alteration of such insurance coverage for any reason.

#### **Section 603.6 – Requirements for Operation of Disposal Areas**

A. General: The Township may impose such conditions or limitations in granting approval as may be permitted by state law and this Ordinance which it deems necessary to fulfill the spirit and purpose of this Ordinance.

B. Location:

1. Disposal areas other than transfer stations shall be permitted only in AG and I Zoning Districts. However, disposal areas shall not be located in areas where the primary use of land is for production agriculture, nor on land which is composed of prime agricultural soils and has been declared essential agricultural land by the local Soil Conservation District. Transfer stations shall be permitted only in I zoning districts.
2. The location of all disposal areas within said districts shall be sufficiently distant from pre-existing development so as not to be injurious to public health, safety, and welfare, and in no instance shall the operation of a landfill be less than one thousand (1,000) feet from any residential home or one thousand (1,000) feet from any residential district. Except where otherwise required herein, the minimum yard setback for the disposal area shall be two hundred (200) feet from the perimeter of the property.
3. No disposal area shall be located within a floodplain as defined in Rule 103 (a) of the Michigan Administrative Code (MAC R.299.4013 (a)) or within a wetland as defined in Act No. 203 of the Public Acts of 1979, being S281.701 et seq. of the Michigan

Compiled Laws, without a permit, or be located closer than one hundred 100 feet to lake, pond, or stream.

C. Access:

1. Access: Access to the disposal site shall be directly from a major thoroughfare as designated on the Township's Master Plan or from a designated secondary thoroughfare, routing along which shall intersect a major thoroughfare not more than one-half (1/2) mile from the principal entrance to the site. Access routes shall be paved roads capable of carrying Class A loadings, on a year-round basis, and shall be constructed and maintained at the operator's expense to Macomb County Department of Road standards. Routing of vehicles to and from a disposal area shall be designated on a map of the Township accurately depicting all roads involved with vehicle routing to the site throughout the Township. Routing of vehicles along thoroughfares through concentrations of residential development shall be avoided.

D. Standards for Landfill Design:

1. Monitoring wells: All sanitary landfill operations shall be so designed and operated that conditions of unlawful pollution will not be created and injury to ground and surface waters avoided which would interfere with legitimate water use in the area of the site. To avoid such hazards, the following precautions shall be taken:
  - a. Borings and wells shall be drilled five (5) feet into the groundwater or twenty (20) feet below the base of the proposed landfill, whichever is deeper.
  - b. One (1) well shall be drilled near the point of highest ground surface elevation, ten (10) feet into the groundwater.
  - c. A minimum of one (1) groundwater elevation and quality monitoring well shall be drilled in each dominant direction of groundwater movement, down-gradient of refuse placement. One (1) monitoring well shall be installed up-gradient of refuse placement. Groundwater monitoring well screens shall be set so that the top of the screen is five (5) feet below the yearly low groundwater table elevation in unconfined aquifers.
  - d. All usable aquifers underlying the landfill site and within one-quarter (1/4) mile of the site shall be delineated.
  - e. All leachates shall be collected and treated in accordance with the current statutes, rules, and regulations of the State of Michigan and its agencies.

2. Fencing and Screening: The entire site shall be completely screened from view by an earth berm extending entirely around the site, the height of which shall be no less than fifteen (15) feet. All berms shall be landscaped with appropriate plant materials, i.e.: deciduous trees, firs, and ground cover, and shall be stabilized by seeding and mulching to prevent erosion. The side slopes of the berm shall not exceed a slope of 1 on 4. Both berms and landscaping shall be furnished at the operator's expense and prior to the beginning of operations. A chain-link type fence, the wire openings of which shall be no greater than two (2) square inches, shall be erected around the entire perimeter of the site. The fence shall be no less than six (6) feet in height and shall be located inside of land adjacent to the earth berm.
3. Height: The height of the landfill, above the original elevation of the property, shall not exceed the height limit for buildings in the zoning district, provided that in no instance shall any landfill exceed a height of fifty (50) feet.
4. Equipment: Adequate numbers, types, and sizes of properly maintained equipment shall be used in operating the landfill in accordance with good engineering practice. Emergency equipment shall be available on the site or suitable arrangements made for such equipment from other sources during equipment breakdown or during peak loads.
5. Fire Protection: Suitable measures shall be available to extinguish accidental fires, as required by Local, County, and State Fire Codes.
6. On-Site Roads: On-site roads shall be designed and constructed so that traffic will flow smoothly. On-site roads shall be paved to prevent dust, mud, dirt, clay, refuse, and like materials from being carried onto public roads. On-site roads shall be always maintained and kept dust-free.
7. Drainage of Surface Water: The entire site, including the fill surface, shall be graded, and provided with drainage facilities to minimize runoff onto and into the fill, to prevent erosion or washing of the fill, to drain off rainwater falling on the fill, and to prevent the collection of standing water. Natural drainage shall not be blocked or diverted in such a manner as to cause the natural water flow to back up onto adjacent property, or to flow in a different course upon leaving the property upon which the blocking or diversion occurs unless an application is made, and a permit is issued by the Building Department pursuant to plans which provide for a drainage flow which will not be detrimental to surrounding properties.
8. Soil Erosion: If a soil erosion permit is required by Act 347 of the Public Acts of 1974 of the State of Michigan, as amended, no operation shall take place until a permit has been obtained.

There shall be compliance at all times with the requirement of the Soil Erosion Permit.

9. Gases: Decomposition gases generated within the sanitary landfill shall be controlled on-site and handled in such a way that they do not become concentrated in explosive or hazardous quantities. The ventilation system shall be maintained during operation and for a period of five (5) years after completion, or longer if deemed necessary by the Board.
- E. Performance Standards: No operation of a disposal area is permitted within the Township unless said operations comply with the current laws and regulations of the State of Michigan and its agencies. Sanitary landfills shall comply with the following requirements:
  1. Supervised Access: The unloading of refuse shall be continuously supervised in fill accordance with the landfill design and planned progress of the site. Access to the site and the unloading of refuse shall be limited to those times when responsible supervision with authority is on site.
  2. Personnel: Sufficient numbers of trained personnel shall be available at the site to ensure the capability of operation in accordance with the requirements set forth herein. Competent supervision of personnel shall also be always provided during the working hours of the operation. Telephone and radio communication equipment, suitable shelter for transmitting, and sanitary facilities shall be provided on-site for employees.
  3. Transporting Wastes: Except as provided otherwise herein, all vehicles hauling material to a disposal area shall have the load enclosed or tightly covered by a tarpaulin or similar device.
  4. Hours of Operation: Disposal facilities shall conduct operations during the following days and hours only:

Weekdays – 7:00 a.m. to 5:00 p.m.  
Saturdays – 7:00 a.m. to 12:01 p.m.

All disposal operations will be closed on Sundays and on legal holidays. Other reasonable restrictions on hours of operation may be included in or added to the conditions of individual licenses. In emergency situations this time period may be modified by the Township Building Department provided such emergency order shall not be effective for more than seventy-two (72) hours.

5. Unloading of Refuse: Unloading of refuse shall be continuously supervised, as set forth above. Tipping fees may be established by resolution of the Township Board.
6. Radioactive or Hazardous Materials: Radioactive or hazardous materials, including, but not limited to, liquids and sewage, shall not be disposed of in a sanitary landfill. This provision, in no way, precludes the right of a landfill operator to exclude any materials.
7. Roads: Major thoroughfares or secondary thoroughfares adjacent to said premises used as approved haul routes, shall be maintained at the operator's expense.
8. Mud, Dirt, Clay, Etc. on Public Roads: The owner or permit holder shall take necessary measures to prevent any mud, dirt, clay, refuse, or other litter onto a public road from the site and prevent any refuse or other litter from being blown or thrown from motor vehicles into trenches or ditches along haul routes. Should such litter be dropped or otherwise tracked onto a public road from the site, or into trenches or ditches along haul routes, the owner or permit holder shall clean or otherwise clear the public road, trenches, or ditches, at its expense as often and as thoroughly as deemed necessary by the Building Inspector to avoid creating a hazard to the safe and efficient movement of traffic on the road. In no case shall any owner or permit holder leave any such debris or litter within a public right-of-way or in trenches or ditches along the haul routes after the end of any working day. If notified during a working day by the Township of a condition that requires cleaning, the matter shall be taken care of within one (1) hour. If a nuisance or hazardous condition is left after a working day, or not cleaned up within one (1) hour after receiving a request from the township, the Township may issue a citation for the violation of this Section due to the allowance of said condition to remain on the highway, and/or clean the right-of-way, and charge the owner and/or permit holder with the cost thereof.
9. Burning: Burning of waste at the site of any landfill is hereby prohibited. All precautions shall be taken to avert spontaneous combustion.
10. Smoke, Dust, Dirt, and Fly Ash: It shall be unlawful to discharge into the atmosphere from any single source of emission whatsoever any air contaminants for a period or periods aggregating more than four (4) minutes in any one-half (1/2) hour which are:
  - a. As dark or darker in shade as the designated as No. 2 on the Ringlemann Chart as published by the United States Bureau of Mines, which is hereby made a part of this Ordinance. However, the Umbrascope readings of smoke densities may be used when correlated with the Ringlemann Chart. A Ringlemann Chart shall be on file in the office of the Building Department.

b. Of such opacity as to obscure an observer's view to a degree equal to or greater than the smoke described in (1) above, except when the emission consists only of water vapor. The quantity of gas-borne or air-borne solids shall not exceed 0.20 grains per cubic foot of the carrying medium at a temperature of five hundred (500) degrees Fahrenheit.

11. Drifted and Blown Material: The drifting or air-borne transmission beyond the property line of dust, particles, or debris from any open stockpile, working areas, or unplanted areas, shall be unlawful and may be caused to be summarily abated.

12. Litter: All litter shall be collected from the landfill site and adjacent properties and roadways by the compacted and covered that day or stored in a covered container. The filling operation shall cease if wind conditions are such that paper and debris are blowing on adjacent properties and roadways.

13. Compactions: Solid waste shall be spread and compacted in shallow layers not exceeding a depth of two (2) feet of compacted material. Compaction of solid waste shall be made to the maximum extent practicable. Individual cells in sanitary landfills shall be of a width and depth commensurate with good design practice. Volumes of individual cells shall not exceed the daily quantity of waste.

14. Cover Material: Soil used as the daily and final cover material shall be of such character that it can be compacted to minimize percolation of water through the cover, does not crack excessively when dry, is free of putrescible materials and large objects, and can grow and supporting vegetation.

15. Frequency and depth of Cover:

a. Daily Cover: A layer of suitable cover materials shall be placed over all solid waste as soon as possible after deposit and at least by the end of each working day. This layer shall be of a depth that when compacted produces a cover layer of at least six (6) inches in depth. The required minimum of six (6) inches of cover shall be maintained at all times. At the end of each day of operation, in all but the final lift of a sanitary landfill, a compacted layer of at least twelve (12) inches of suitable material shall be placed on all surfaces of the landfill where no additional refuse will be deposited within sixty (60) days. Any disposal area receiving daily cover which will not be filled with additional solid waste for a period greater than one (1) year, shall be covered with a total of two (2) feet of suitable cover material.

b. Final Cover: Final cover of suitable material compacted to a minimum thickness of two (2') feet shall be placed over all completed areas or cells by the end of the working day on which the area or cell was completed. Areas receiving final cover

shall be covered as soon as possible with a minimum of four (4") inches of topsoil and seeded so that vigorous vegetation sufficient to stabilize the cover and prevent soil erosion and dust is established.

- c. General Cover Requirements: Daily and final depth of cover requirements may be increased if the suitable cover material is not being utilized. Three (3') feet of clearance shall be maintained between trenches when the trench method is used. Operations shall be planned and conducted so that the minimum possible amount of solid waste is exposed at any one time. All daily cover depths must be continually maintained, and final cover depths shall be maintained for a period of ten (10) years.
- d. Malodorous or Ash-Like Waste: Unusually malodorous solid wastes or ash-like material shall be covered immediately after the disposal.

16. Completed Sections: The permittee shall inspect the entire surface of completed sections of the landfill at least quarterly following placement of the final two (2') feet of cover material. All cracked, eroded, uneven, and unvegetated areas shall be promptly repaired.

17. Bulky Wastes and Recyclable Materials: Adequate provision shall be made for the handling and compaction of bulky solid wastes when such wastes are not excluded from the "site. Operators are encouraged to establish recycling operations for such bulky solid wastes as refrigerators, washers, dryers, and the like where substantial amounts of metals can be returned to the cycle of industrial production, as well as for the recyclable material. Unless these materials are removed immediately, storage of materials to be recycled must be confined to an enclosed building, unless another suitable storage method is approved by the Board.

18. Salvage: Salvage operations shall be permitted only if special provisions are approved by the Board to ensure that separation of material and disposition are undertaken in a suitable manner. No salvage operation shall create unsightliness, nuisances, health hazards, or potential health or safety hazards.

19. Scavenging and Animal Feeding: Scavenging and animal feeding on the site shall not be permitted.

20. Sound: The pressure level of sounds shall not exceed the following decibel levels when adjacent to the following types of uses:

<u>Sound Level</u>	<u>Adjacent Use</u>	<u>Where Measured</u>
75 dBA	Residential	Common Property Line
85 dBA	Commercial	Common Property Line

90 dBA

Industrial & Other Common Property Line

The sound levels shall be measured using a weighted decibel measurement (referenced to 20 micro pascals) and with a type of audio output meter approved by the U.S. Bureau of Standards. Objectionable noise due to intermittence, beat, frequency, or shrillness, shall be muffled so as not to become a nuisance to adjacent uses.

21. Vibrations: All machinery shall be so mounted and operated as to prevent transmission of ground vibration exceeding a displacement of 0.003 of one inch measured at any property line of its source.
22. Odors: The emission of noxious, odorous matter in such quantities as to be readily detectable at any point along lot lines, when diluted in the ratio of one volume of odorous air to four or more volumes of clean air, or as to produce a public nuisance or hazard beyond lot lines, is prohibited.
23. Gases: The escape of or emission of any gas so as to be injurious, destructive, or explosive shall be unlawful and may be caused to be summarily abated.
24. Glare or Heat: Any operation producing intense glare or heat shall be performed within an enclosure so as to completely obscure and shield such operation from direct view from any point along the lot line, except during the period of construction of the facilities to be used and occupied.
25. Light: Exterior lighting shall be so installed that the surface of the source of light shall not be visible from any bedroom window and shall be so arranged as far as practical to reflect light away from any residential use, and in no case shall more than one-foot candle power of light cross a lot line five (5') feet above the ground in a residential district.
26. Insect and Rodent Control: Conditions unfavorable for the production of insects and rodents shall be maintained by carrying out routine landfill operations promptly in a systematic manner. Supplemental insect and rodent control measures shall be instituted whenever harmful movements of gases or contamination to the ground or surface water and/or environment for ten (10) years after completion or expiration of Permits. Should the cost of said restoration exceed the amount of the bond, the Permittee shall pay the Township the amount of such excess.

G. The Building Inspector and/or Official and/or Township Engineer shall conduct inspections hereunder, and shall notify the owner and/or operator by regular mail of any portions of the site that it deems abandoned and/or ready for restoration, Upon

receipt of such notification, the owner and/or operator shall have said areas restored within thirty (30) days, or within said thirty (30) day's supply the Board with a written reply indicating the dates of anticipated restoration, The Board may accept or reject said dates, If said dates are accepted, they shall be binding on both parties, if rejected, the Board shall set new dates which shall be final.

H. Completion of Landfill:

1. Requirements: The Permittee shall notify the Township not less than thirty (30) days prior to any temporary or permanent suspension of disposal operations at a particular site, so as to enable the scheduling of necessary Board meetings. The Permittee shall not remove equipment from the site prior to approval by the Board. The Board shall direct the Permittee to perform any corrective work required to fulfill the requirements of this Ordinance. Required corrective work shall be completed before the landfill operation is suspended or accepted as completed. An insect and rodent control program may be required as part of the completed work. A suitable bond may be required by the Township to guarantee such completion and maintenance.
2. Repair: The Permittee shall repair all cracking, eroded, and uneven areas in the final cover, which occur during a ten (10) year period following completion of the landfill. During this period, the cover surface shall be re-topsoiled and reseeded if insufficient vegetation exists to stabilize the surface.
3. Monitoring Program: Monitoring of ground and surface waters, decomposition gases, and leachate shall be tested every three (3) months and continue for at least five (5) years following completion of the landfill in accordance with the current standards of the state of Michigan and its agencies, and test results shall be submitted to the Township at such times as required by the Board.
  - a. Reuse of Completed Landfills: Any person owning or controlling any partially completed or fully completed landfill shall obtain the approval of the Board by permit under this Ordinance prior to any reuse of such property.

**Section 603.7 – Inspections**

- A. By accepting a Permit issued under this Ordinance, the owner and/or operator of any disposal area shall be presumed to have consented to regular and routine inspections of the property. Said consent shall be the authority to go on to any property under permit for purposes of any inspection, whether announced or unannounced. The cost of said inspections shall be paid for by an annual permit fee, established by resolution of the Lenox

Township Board.

B. Quarterly inspections in testing for purity of surrounding areas wells, if requested by Lenox Township homeowners, or the Township Board, shall be done by a laboratory selected by Lenox Township and at the operator's expense. If a well is contaminated after a landfill begins operation, the operator will, within ten (10) days of written notice by the laboratory sent to:

1. The owner of the well.
2. The Lenox Township Clerk.
3. The landfill operator.

Necessary inspections shall be made quarterly by the appropriate State Agency.

C. Operating Reports and Records:

1. Records: The Permittee shall maintain written records of the estimated volume and weight of solid wastes accepted at the landfill, the source of the waste, and the name of the hauler. In addition, the Permittee shall maintain records of the location and completion date of each refuse lift or trench. Separate records of the same type shall comply with special solid waste. All records shall be made available to the Township upon request.
2. Reports: The Permittee shall submit reports to the Board at such time as the Board shall require. These reports may include the following information, as required by the Board:
  - a. Monthly data on quantities of waste (weight and volume) for each distinguishable type of waste, including those that require separate disposal, the sources of the waste, and name of the hauler. Mixed municipal refuse may be considered as a single type of waste.
  - b. A schedule of charges for use of the sanitary landfill.
  - c. Estimated volume and area of landfill used during the report period and the landfill's projected life.
  - d. Identification and number of lifts or trenches completed, and dates completed.
  - e. During the year following final cover (completion) of area of the landfill, reports shall include a description of the repairs affected which includes location and extent.

f. The accuracy of the reports shall be verified by the signature of the Permit holder or his authorized representative.

D. Construction Certification: As-built drawings detailing the location, material, and method of construction of landfill liners; leachate collection, treatment, and disposal systems; ground and surface water control measures; monitoring points; and other constructed features required by the Ordinance shall be prepared and sealed by a Registered Professional Engineer, including certification that the construction of landfill facilities conforms to submitted plans and specifications and the specific conditions attached to the Landfill Permit by the Planning Commission. In addition, testing, according to standard methods, shall be made to determine the hydraulic conductivity of installed liners. Such testing shall be performed and certified by a qualified testing laboratory or a registered professional engineer at a frequency to be specified by the Board, depending on the nature of the liner materials.

E. Restoration:

1. All areas within any landfill or excavation site operating under a single Permit shall be restored progressively. Restoration shall be in accordance with the plan approved by the Board. Restoration shall be to a condition that blends with the general surrounding terrain to appear reasonably natural. Quarterly testing and analysis of groundwaters and surface waters shall be provided by the operator, with recent testing results being provided immediately prior to relicensing.
  - a. In the event that the restoration does not comply with the above requirements, or in the event said restoration is not complete within sixty (60) days after expiration of all permits issued pursuant to this Ordinance, or after the days as set pursuant to subparagraph (2), the Township may utilize the bond proceeds to restore the site and affected areas to comply with the approved plan and perform whatever work needs to be done to avoid or initiate whatever measures are necessary to keep the well in question in the equivalent amount of pure and usable water and the operator shall within thirty (30) to sixty (60) days after notification do whatever is necessary, at the operator's expense, to replace that well owner's water supply. If not completed within sixty (60) days, the operator shall receive a ten (10) day notice of violation of this Ordinance and that the landfill operator will be assessed a cost of one hundred dollars (\$100.00) per day for every day that well owner's water supply remains disturbed, interrupted, contaminated, impure, etc. Seventy-five dollars (\$75.00) per day of said cost shall be paid to the well owner and twenty-five dollars (\$25.00) per day of said fine shall be paid to Lenox Township to cover the costs of handling enforcement of this Ordinance. If the problem is not corrected and all violations and costs are paid within a total period of ninety (90) days from the date of the written notice by a laboratory as provided herein, the Township shall cause the entire

operation of the sanitary landfill to cease until the operator applies for, appears before the Lenox Township Board, and is granted a permit to start up operations again.

### **Section 603.8 – Violations and Penalties**

- A. Any person violating any of the provisions of this Ordinance shall be guilty of a misdemeanor, and upon conviction thereof shall be subject to a fine of not more than five hundred dollars (\$500.00) plus costs of prosecution, or imprisonment in the County Jail for a period of not to exceed ninety (90) days, or both such fine and imprisonment at the discretion of the Court, together with the cost of said prosecution.
- B. In addition to such fine and/or imprisonment, the Board may notify the owner and/or operator of any violation of the permit and/or this Ordinance, and upon failure of the owner and/or operator to abate said violation within five (5) days after the certified mailing of said notice, said operation site may be closed and the permit therefore suspended or revoked.
- C. Any owner and/or operator aggrieved by any notice sent pursuant to this Section, may file a written request for a hearing before the Board. The request should set forth why the operation site should not be summarily closed, and the Permit suspended or revoked.
- D. Failure to adhere to routes designated on an approved routing plan or routes subsequently approved by the Township Board shall be considered a violation of this Ordinance and shall be punishable by a cost of fifty dollars (\$50.00) for the first violation and punishable hereafter by costs of one hundred dollars (\$100.00) for all subsequent violations.
- E. All such costs shall be paid within ten (10) days of each violation. Any driver receiving a second violation while having any unpaid costs outstanding shall have his other vehicle impounded until said costs are paid. If the vehicle consists of a cab, tractor, and trailer rig, all will be impounded. Any driver having received a total of three (3) or more violations within a twelve (12) month period, shall be prohibited access within Lenox Township's limits for a period of ninety (90) days restriction shall have his vehicle impounded for thirty (30) days. If the vehicle consists of a cab, tractor, or trailer rig, all will be impounded.

