EU-1 EXCLUSIVE USE ZONE 1 SANITARY LANDFILL.

1. Findings of Fact. The following facts establish the need to place sanitary landfills into an Exclusive Use Zoning District.

   A. Characteristics of a Sanitary Landfill. A sanitary landfill is primarily a one-of-a-kind community facility which may be a necessary part of the community's waste disposal system. The high volume of heavy truck traffic and the potential for associated noise, odor and other nuisance-like characteristics suggest industrial zoning would be appropriate. However, a sanitary landfill has limited duration use, and the filled land may not be suitable for industrial uses that require substantial weight bearing foundations. This limitation makes industrial zoning inappropriate for the location of subsequent uses on this land. Major factors in determining the proper site location for landfills are the suitability of the soil and underground drainage systems - neither of which is usually factors in the location of industrial zones. Therefore, the site location criteria for a sanitary landfill must be defined separately.

   B. Need for Specific Standards. If proper sanitary landfill standards are not strictly adhered to, the operation may result in an open dump and create a serious health hazard. A completed landfill will settle and require periodic maintenance. Because of this settlement factor, special design and construction must be utilized for buildings constructed on a completed landfill. As a result of all these factors listed above, sanitary landfills must be placed in an exclusive use zone that includes specific design standards and appropriate protection for subsequent use.

2. General Intent. The major purposes and objectives of this zone are to place sanitary landfills in an exclusive use zone in order to establish site location and design standards which will:

   A. Protect public health by preventing water pollution, rodent infestation, air pollution, or other health hazards as would occur as a result of improper location, design, or operation of a landfill.

   B. Protect public safety by requiring proper design of access roads to accommodate the heavy equipment necessary for collection, transportation and disposal of solid wastes.

   C. Improve compatibility with adjacent uses by requiring adequate screening and set back, regular policing of access road and heavily traveled routes to the site, and careful review of subsequent uses allowed on the landfill site.
D. Promote public welfare by providing a suitable location for the disposal of the solid wastes generated by the community and preserve prime agricultural ground.

E. Incorporate local siting approval as specified in Iowa Code §455.305A. This State Code provision requires that prior to siting of a proposed, new sanitary landfill the City Council must approve the site based on meeting certain criteria. It is the intent of this section that to the greatest extent possible that the local siting approval process and the zoning district reclassification process run concurrently.

3. Other Applicable State of Iowa Laws and Administrative Code Requirements. Other State of Iowa laws and administrative code requirements may apply to an application, including, but not limited to laws and rules related to: the issuance or renewal of permits for construction and operation of sanitary landfills, processing facilities, composting facilities, recycling facilities, solid waste management facilities, infectious waste incinerator projects, and waste tire facilities; handling and disposal of hazardous waste and waste oil; and local approval.

4. Applicability. The requirements and performance standards as herein provided shall apply to all new or lateral expansions of lawful sanitary landfill projects.

5. Principal Permitted Uses. Sanitary Landfill.

6. Accessory Uses.
   A. Transfer Station
   B. Recycling Facility
   C. Compost Facility
   D. Household Hazardous Waste Facility
   E. Agricultural Uses
   F. Wild Life Refuge or Similar Public Purpose Uses

7. Site and Structure Requirements.
   A. Minimum Lot Area. There shall be no minimum lot area requirement, except that a site must be of sufficient size to accommodate the amount of waste estimated for deposit during the planned life of the landfill.
   B. Minimum Lot Width. None
   C. Setback Requirements. The principal permitted use, including all activities related to operation of the principal permitted use such as stock piles, shall meet the following minimum setback requirements:
Front Yard Setback 200 Feet
Rear Yard Setback 200 Feet
Side Yard Setback 200 Feet
Corner Side Yard Setback 200 Feet
Maximum Structure Height 100 Feet

D. Accessory Uses, Buildings and/or Structures. All accessory uses, buildings and/or structures, except those as set forth in subsection 6(E) and 6(F) herein, shall meet the same site and structure requirements as principal permitted uses and shall be set out in the application.

E. Fencing. The footprint of the planned waste disposal area shall be enclosed with a substantial wall, chain link fence, other adequate barrier, at least eight (8) feet in height, designed to keep people, children and animals out of the active landfill area, or an alternative provision which will accomplish the same. The entrance gate must be capable of being locked and posted for non-entry.

F. Sign and Directions. Necessary identification and directional signs shall be provided. A sign shall be posted at the entrances to inform the public of the hours of operation, cost of disposal, and rules and regulations regarding disposal. Interior signage shall be provided that directs users to the appropriate unloading area.

G. Lighting. Lighting shall be provided in such a way as to not interfere with roadway traffic, spill over on adjacent properties, and/or pollute the night sky.

H. Parking. Two (2) spaces per employee shall be required.

I. Buffer. The landfill shall be adequately buffered on all sides between the footprint of the planned waste disposal area and perimeter boundaries of the property so as to offset fugitive dust, noise, vibration and visual impact to adjacent property. All screening and buffering shall be completed on site. The buffer areas shall be landscaped and graded consistent with the approved site plan prior to the acceptance of any solid waste.

8. Application for Landfill Siting and EU - Exclusive Use District Reclassification. The applicant shall submit an application for zoning district reclassification and local site approval to the City Council. The Council shall forward the application to the Department to review the completeness of the application. A complete application includes the following:

A. A completed application form. The application must be on forms as provided by the Department which will include, but not be limited to, information required by Iowa law for local siting approval. The application form must be signed by the owner(s) of the property as such and, if applicable, the entity seeking the reclassification as applicant.
B. The application fee for the specific review and processing of the rezoning reclassification shall be set by the Council.

C. The applicant shall provide proof of written notice and proof of publication of notice of their intent to submit an application to the Council for local siting approval and zoning district reclassification in the manner as prescribed for in Iowa Code §455B.305A(3). One complete paper copy and one complete electronic copy of the mailing list utilized to provide written notice to property owners shall be provided to the Council.

D. The applicant shall demonstrate notice to the Iowa Department of Natural Resources (IDNR) that the local siting process has been initiated.

E. Detailed plans, maps and reports shall be submitted in the numbers as indicated herein or as approved by the Department. The data in the following reports shall be prepared in a form which facilitates its use in proper engineering design of the landfill. Problem areas must be delineated and recommendations for proper solution included in the report. The following shall be submitted:

   (1) Map or Aerial Photograph. The map or photograph shall be at a scale of not more then 400 ft. to the inch. The map or photograph shall locate the boundaries of the site and identify the following:

      a. North compass point.
      b. Zoning and land use within one mile.
      c. Haul routes to and from the site with load limits or other restrictions.
      d. Residential structures and other buildings within at least one mile.
      e. Section lines and/or other legal boundaries.
      f. Nearby runway used or planned to be used by turbojet or piston-type aircraft at FAA certified airports.
      g. Lakes, ponds, watercourses, wetlands, dry runs, and/or rock outcroppings within one mile of the site.
      h. Topography and drainage patterns within one mile.
      i. All wells within one mile.
      j. A bench mark.

   (2) A Major Site Development Plan. The plan shall be prepared in the following manner and with the following information:
a. Number of Copies and Size. Ten (10) copies on 8½" x 11" sheet size minimum - larger as required (18" x 24" preferred). Ten (10) copies of the same site development plan on 11" x 17" sheet size (must be legible).

b. Scale. 1" = 50' or as approved by the Zoning Administrator.

c. Preparation. Only by an engineer certified in the State of Iowa.

d. Orientation. Include North directional arrow and map scale indication.

e. Location map showing relation to surrounding roads, streams, and public facilities.

f. Address and legal description of parcel or lot.

g. Title block including the name, address and phone number of the petitioner and owner and the engineer's name, seal, the date, and the date of all revisions.

h. Existing and proposed zoning classification, use of property, number of employees.

i. Ownership, land use, and zoning of all adjoining properties.

j. Any anticipated planned systems for collection, storage, transport, and disposal of leachate, methane or other byproduct of the facility.

k. Existing and proposed property lines (proposed property lines must be delineated in a heavier line weight). Provide dimension of existing and proposed lot boundaries.

l. Existing and proposed right-of-way lines, setback lines and buffer areas.

m. Existing contour lines at intervals of ten (10) feet.

n. Proposed contour lines at intervals of five (5) feet.

o. Watercourses, floodways, flood plains, and wetlands.

p. Any unique natural feature.

q. Location and dimensions of all existing and proposed structures. All structures shall be delineated in square feet, and dimensions to existing and/or proposed lot lines must be provided as well as dimensions between structures.
Existing and proposed structures must be labeled as to their use (i.e. existing warehouse). Structures include wells, fences, septic, utility poles, LP tanks, etc. Also existing roads must be shown.

Existing and proposed parking spaces (number, type, dimension and class). Must provide notation of the number of spaces required and the number provided.

All utility easements.

Radius of curvature of ingress and egress drives.

Circulation patterns of traffic.

Access to all public and private streets.

Location and size of existing or proposed free standing and/or attached signs and their illumination techniques if applicable.

All existing and proposed locations, intensity, height, spacing, efficiency, and shielding of all exterior lighting.

Locations of outside refuse collection areas, and the type of screening to be provided. Refuse containers must be enclosed from public view.

Estimate of increase in vehicle trips per day by type of vehicle.

Any other information deemed necessary by the Zoning Administrator.

Traffic Routing Plan. The plan must be prepared by a qualified traffic engineer. The plan must comply with the City's Major Street Ordinance and delineate the following:

- Major transportation routes.
- Overpasses with height limitations.
- Bridges with weight limitations.
- Railroad crossings.
- Flow of traffic to proposed site by type.
- Current and anticipated daily traffic flows to site.

Preliminary Hydrogeologic Investigation Report. The report must be prepared by a registered professional engineer licensed in the State of Iowa or qualified hydrogeologist. Information included in the report must include:
a. General site description including slope, topography, surface drainage and geologic setting.

b. Description and characteristics of soils including soil types, dominant soil texture, hydraulic conductivity, and suitability of soil for cover and liner construction.

c. Description and characteristics of bedrock including type, thickness, and physical characteristics (ease of excavation, fractures, sinkholes, direction of dip, and solution holding capacity), porosity, and hydraulic conductivity.

d. Description of site hydrogeology, including distance to permanent streams, springs and lakes, depth to water table, flood hazard potential and underlying aquifer characteristics.

e. An assessment of the impact on any existing hydrogeological conditions on the proposed or surrounding site.

f. Specific recommendations as to site suitability for use of the property as a sanitary landfill.

(5) Habitat and Wetland Inventory. A listing of plant and animal species prepared from the records of the Iowa Department of Natural Resources - Preserves and Ecological Service Bureau. The applicant shall request that the Bureau search its records to determine the presence of or habitat for any threatened or endangered species or communities and any forest, prairies or wetlands or the potential thereof. The applicant shall submit a wetland delineation report prepared by a qualified consultant. An assessment of the impact on any habitat or wetland on the proposed or surrounding sites shall be completed by a qualified consultant.

(6) Impact Report on Archaeological, Historical, or Architecturally Significant Properties. An assessment of the impact on any archaeological, historical, or architecturally significant properties on the proposed or surrounding sites. The applicant is required to request review and comment from the State Historical Society of Iowa and the Marion Historic Preservation Commission.

(7) Report on Compliance with Solid Waste Planning Documents. The applicant shall submit a report on how its proposed sanitary disposal project is consistent with the Cedar Rapids/Linn County Solid Waste Agency Integrated Solid Waste Management Plan and the East Central Iowa Council of Government's Regional Solid Waste Management Plan. A letter of compliance from each entity must accompany the report.
(8) Need. The applicant must provide a report that outlines the need for siting of the new or lateral expanded sanitary landfill. Current supporting data must accompany the report which substantiates the need as well as the type and size of sanitary landfill.

(9) Operations Site Plan(s) and Report(s). The plans and reports shall indicate the following:

a. The proposed fill area.
b. Any borrow area.
c. Access roads.
d. On-site drives.
e. Grading plan and cross sections to identify ultimate height above existing grade.
f. Special drainage devices, if necessary.
g. Location and type of fencing.
h. Structures existing or to be located on the site.
i. Existing wooded areas, trees, ponds or other natural features to be preserved.
j. Existing and proposed utilities.
k. Conceptual timetable and sequence of phasing of landfill operations on the site.
l. Proposed method of operation including weighing of wastes, cross-sectioning the site at definite time intervals, thickness of cover material, depth of cells and lifts, compaction, wet weather procedures, cold weather procedures, amount, type and size of equipment and personnel.
m. Proposed methods to prevent surface water runoff of possible pollutants.
n. Proposed systems for collection, storage, transport, and disposal of leachate.
o. Conceptual plan for control of methane gas including recovery, collection, monitoring and disposal.
p. Any other pertinent information to indicate clearly the orderly development and operation of the facility.

(10) Land Value Assurance Program. The applicant shall submit a conceptual plan on how the proposed land value assurance program will operate and shall include the following at a minimum:
a. Written description of overall program, goals, objectives, intent and schedule.

b. Identification of property owners who may be eligible for the program and duration for eligibility.

c. Number and type of appraisals to be conducted, how appraisals should be conducted and who pays for the appraisals.

d. Period of time during which program exists.

e. Explanation and example of how compensation could be calculated.

(11) Conceptual End Use Plan. The plan shall include the following:

a. A proposed plan and schedule for site restoration and completion.

b. A plan outlining the ultimate land use of the site, or a plan that demonstrates possible ultimate land uses.

c. Any other pertinent information that would address final site restoration and possible future reuses of the property.

d. The applicant must provide in a written report on how maintenance after closure will be ensured in compliance with State Code requirements for closure and post closure.

9. Procedure for Zoning District Reclassification and Local Siting Approval. The following procedure shall be followed for review of the zoning district reclassification:

A. The Council, upon receipt of a complete application, shall forward copies of the joint application for local siting approval and zoning reclassification to the Commission. The Commission and Council shall hold one joint public informational meeting within thirty (30) days of receipt of a complete application. The purpose of the meeting is to provide an outline of how the City will process, review and make a decision on the application. The applicant shall provide a complete overview of the application submitted and address how compliance with all federal, state, and local site and structure requirements and all performance standards are either being met or an alternative solution is being proposed.

B. The Commission shall, within thirty (30) days after the public informational meeting, hold a special meeting to consider the joint application and shall formulate and forward to the Council a recommendation regarding the zoning district reclassification.
C. Notice of the special meeting to consider the joint application shall be published in the official newspapers in accordance with Iowa Code §331.305 utilizing the same mailing list of property owners as provided by the applicant as prescribed in Iowa Code §455B.305A(3). The Department shall notify property owners of the special Commission meeting by ordinary first class mail.

D. The Council shall receive the recommendation of the Commission and hold a public hearing in conformance with Iowa Code §455B.305A(5) and this section. The Council shall not make a decision on the joint application until the public has had an additional thirty (30) day opportunity to provide written comments on the application for zoning district reclassification.

E. Notice of the public hearing shall be published in the official newspapers in accordance with Iowa Code §331.305 utilizing the same mailing list of property owners as provided by the applicant as prescribed in Iowa Code §455B.305A(3) The Department shall notify property owners of the public hearing by ordinary first class mail.

F. At the conclusion of the thirty (30) day review period the Council shall determine upon first consideration the zoning district reclassification. The Council can approve, continue consideration or deny the application. If the reclassification is denied the joint application shall be deemed concluded.

G. Within fourteen (14) days after approval of first consideration the Council shall hold second consideration of the zoning district reclassification request. The Council may approve, continue or deny the application. If the reclassification is denied the joint application shall be deemed concluded.

H. Within fourteen (14) days after approval of second consideration the Council shall hold third and final consideration of the rezoning district reclassification. The Council may approve or deny the application. If the reclassification is denied, the joint application should be deemed concluded. If the zoning district reclassification is approved, the Council shall have the joint application submitted to the Zoning Board of Adjustment for consideration of the local siting approval request.

I. An applicant shall not file a request for zoning district reclassification and/or local siting approval, which is substantially the same as a request which was denied, within the preceding two years. The two-year time period starts from date of issuance of the Council's written decision.

J. Prior to final approval of the rezoning classification the applicant and Council shall sign an agreement which binds the applicant to meeting local conditions of the rezoning classification.

10. City Council Reclassification Evaluation Criteria. The following criteria shall be the basis upon which the Commission shall formulate their recommendation
to the Council and upon which the Council shall render their decisions on reclassification.

A. Need Criteria. The project is necessary to accommodate the solid waste management needs of the area in which the project is intended to serve. In addition, the following standards shall be met:

(1) The applicant's proposal conforms to the most currently approved East Central Iowa Council of Government's - Regional Solid Waste Plan.

(2) The applicant's proposal conforms to the most currently approved Cedar Rapids/Linn County Solid Waste Agency's - Integrated Solid Waste Management Plan.

(3) The applicant's proposal justifies the size and type sanitary landfill proposed.

B. Protection of the Public Health, Safety, and Welfare Criteria. The project is located and proposed to be operated so that the public health, safety, and welfare will be protected. In addition, the following standards shall be met:

(1) Public health shall be protected by preventing water pollution, ground water contamination, excessive noise, odor or dust, leachate contamination, methane gas exposure, rodent infestation, air pollution, or other health hazards as would occur as a result of improper location, design, or operation of a landfill.

(2) Public safety shall be ensured by requiring proper design of access roads to accommodate the heavy equipment necessary for collection, transportation and disposal of solid wastes.

(3) Compatibility of land uses shall be assured by requiring adequate screening, buffering and set back, regular policing of access road and heavily traveled routes to the site, and careful review of subsequent uses allowed on the landfill site.

(4) Public welfare shall be protected by providing a suitable location for the disposal of the solid wastes generated by the community.

C. Compatibility Criteria. The project is located so as to minimize incompatibility with the character of the surrounding area and to minimize the effect on the value of the surrounding property. In addition, the following location and design standards must be met:
(1) The landfill cannot significantly impact a unique scenic, cultural or historic area. If unavoidable, the applicant will provide mitigation either in design provisions or host community benefits.

(2) The landfill cannot be located in a primary residential area as designated on the most recently adopted City of Marion Future Land Use Plan.

(3) The landfill cannot be located in park and open space areas as designated on the most recently adopted City of Marion Future Land Use Plan.

(4) The applicant shall provide a land value assurance program, as defined herein, for all privately owned properties within one mile of the landfill boundaries and to the host community and all other affected taxing bodies for loss of taxable valuation.

D. Plan of Operation Criteria. The project is designed to minimize the danger to the surrounding area from fire, spills, or other operational accidents. To this end the applicant must demonstrate, in their site plan, operational site plan, and plan of operations that the additional following standards can be met:

(1) An aggressive and effective vector and litter control program shall be provided.

(2) Solid waste will not be deposited in such a manner that material or leaching from the waste could cause pollution of ground or surface waters.

(3) All fill areas are accessible for solid waste disposal during all weather conditions under which solid waste can be received.

(4) An aggressive soil erosion program and cover maintenance program are provided. To that end the finished surface of the site must be kept in good repair, covered with soil, and seeded with native grasses or other suitable vegetation immediately upon completion or promptly in the spring to areas terminated during winter conditions.

(5) The facility management and its employees are properly trained in landfill operations and that an emergency response program is provided for.

E. Traffic Patterns and Roadway Provisions. The site should be easily reached by asphalt or concrete paved city or county trunk roads, state highways or federal interstates. All roads to the site should be of sufficient width and construction to safely handle all sizes of trucks when fully loaded during all weather conditions. Problems such as narrow bridges, low underpasses, and steep grades on access routes must be avoided. The City
may require the applicant to pay in whole or in part the cost to the City for providing roadway improvements necessary for the siting of a landfill. In addition, the following standards must be met:

1. The traffic patterns to and from the project have been designed to minimize the impact on existing traffic flows.

2. Safe design of entrances and exits, with provision for right turn deceleration lanes, protected left turn lanes, acceleration lanes and, if needed, signalization of intersections.

3. The site should be accessible at all times. Several access routes are planned so that if one route is temporarily unusable, the site can still be reached.

4. The distance of driveway entrance or exit from any adjacent lot line should be at least one hundred twenty-five (125) feet. The landfill access drive, within one hundred fifty (150) feet of the public street, shall be paved.

5. The on-site roads to the unloading area should be of all weather construction and wide enough to permit two-way truck travel. Road grades should be designed for the largest fully loaded trucks to travel at a reasonable rate.

F. Previous Operating Experience of a Private Agency. A private applicant shall submit information regarding the previous operating experience of the agency and its subsidiaries or parent corporation in the area of solid waste management or related activities. Past performance shall be considered as an indicator of how the proposed landfill could likely affect the health, safety, and welfare of area residents or businesses.

11. Zoning Board of Adjustment Siting Evaluation Criteria. The following criteria shall be the basis upon which the Zoning Board of Adjustment shall formulate their decision. The following criteria are site location design standards and/or performance standards which shall be met. This listing of standards is not intended to be inclusive of all that may be required of the applicant to satisfy the evaluation criteria.

A. Protection of the Public Health, Safety, and Welfare Criteria. The project is designed, located and proposed to be operated so that the public health, safety, and welfare will be protected. In addition, the following standards shall be met:

1. The fill area is to be located and designed so as to obviate any predictable lateral movement of significant quantities of leachate from the site to standing or flowing surface water or to shallow aquifers that
are in actual use or are deemed to be of potential use as a water resource.

(2) The fill area is to be located and designed so that the base of the landfill is at least 5 feet above the high water table unless a greater separation is required to ensure that there will be no significant adverse effect on ground or surface water or a lesser separation is unlikely to have a significant adverse effect on ground and surface waters.

(3) The footprint of the planned waste disposal area is located outside of a delineated flood plain.

(4) The footprint of the planned waste disposal area is so situated as to ensure: i) no adverse effect on any well within 1,000 feet of the site and in existence at the time of application which is being used or could be used without major renovation for human or livestock consumption; or ii) at least 1,000 feet from any such well unless hydrologic conditions are such that a greater distance is required to ensure there is no adverse effect on the well; or an agreement between the owners has been provided for.

(5) The fill area is located so that the source of any community water system in existence at the time of application is within one mile of the site or is at least one mile from the source of any community water system in existence at the time of application. One mile shall be the minimum distance from the fill area unless hydrologic conditions are such that a greater distance is required to ensure no adverse effect on the water system.

(6) The footprint of the planned waste disposal area is not located in fragile land areas including, but not limited to, wetlands, and/or karst terrain.

(7) The footprint of the planned waste disposal area is not located in areas with rare or valuable ecosystems or geologic formations or significant wildlife habitat.

(8) The footprint of the planned waste disposal area is not located in areas with slopes of greater than twenty-five percent.

(9) The design of the landfill shall be compatible with the natural terrain of the surrounding landscape.

B. Plan of Operation Criteria. The project is designed to minimize the danger to the surrounding area from fire, spills, or other operational accidents. To this end the applicant must demonstrate, in their site plan,
operational site plan, and plan of operations that the additional following standards can be met:

1. An aggressive and effective vector and litter control program shall be provided.

2. Solid waste will not be deposited in such a manner that material or leaching from the waste could cause pollution of ground or surface waters.

3. All fill areas are accessible for solid waste disposal during all weather conditions under which solid waste can be received.

4. An aggressive soil erosion program and cover maintenance program are provided. To that end the finished surface of the site must be kept in good repair, covered with soil, and seeded with native grasses or other suitable vegetation immediately upon completion or promptly in the spring to areas terminated during winter conditions.

5. The facility management and its employees are properly trained in landfill operations and that an emergency response program is provided for.


A. Inspection. An inspection of the entire site shall be made by the Iowa Department of Natural Resources, or their designee, to determine compliance with IDNR approved plans and specifications prior to issuance of an occupancy permit by the Department. In addition, an inspection of the entire site shall be made by the designee(s) of the Council to determine compliance with all site and structure requirements or other standards to be met as outlined in the written decision of the Council prior to issuance of an occupancy permit by the Department. Any necessary correcting work as directed by IDNR or the County shall be performed before the landfill project is accepted as completed and ready for issuance of an occupancy permit by the Department.

B. Subsequent Zoning. The Exclusive Use District (EU) designation replaces the previous zoning classification and, upon completion of the sanitary landfill operation, no other use shall be permitted without a rezoning and map amendment as provided in this chapter.

13. Waiver of Requirements or Standards. Whenever strict application of the requirements or standards of this section would result in substantial hardship or injustice, the Zoning Board of Adjustment, after recommendation by the Planning and Zoning Commission, may vary or modify such requirements or standards. Said waiver or modification may be granted so long as the applicant can demonstrate the
public health, safety, welfare, and interests of the City and the surrounding area are protected, and that the general intent and spirit of this section are preserved.

(Ord. 05-14 – Nov. 05 Supp.)