MANSFIELD TOWNSHIP, WARREN COUNTY
WASTEWATER MANAGEMENT PLAN

UPPER DELAWARE WATER QUALITY MANAGEMENT PLAN

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I. INTRODUCTION

The purpose of this document is to provide a comprehensive Wastewater Management Plan (WMP) for Mansfield Township, Warren County. The WMP has been submitted to the New Jersey Department of Environmental Protection (NJDEP) for approval so that it may be incorporated into the Upper Delaware Water Quality Management Plan via the plan amendment procedure (N.J.A.C. 7:15). This plan has been developed with the Township governing bodies and review boards. The Township has completed a considerable amount of planning with regard to environmental constraints as evident in the Township Master Plan. This WMP is in accordance with the Master Plan and represents the presently anticipated wastewater management needs through the year 2024. It is based upon the current sewer policies of the municipality, existing wastewater treatment facilities and their service areas approved by NJDEP, proposed developments that have preliminary approval from the Planning and/or Zoning Boards and those under review by the Planning and/or Zoning Boards. Current zoning and existing land use have been utilized to determine the future wastewater needs. This plan may be amended from time to time to meet the wastewater management needs of Mansfield Township.

Mansfield Township falls within the water quality management area known as the Upper Delaware. The water quality management plan for this basin is the principal means for identifying facilities that are needed within the planning area. Projects that impact the water quality management within the planning area must be determined to be consistent (or not addressed) with this plan before any action might be taken by the NJDEP in approving or issuing permits for the construction and operation of new or expanded wastewater collection, treatment and disposal facilities, as well as other projects that impact water quality.

The organization of the Wastewater Management Plan includes sections that identify the existing conditions of the township that influence growth, existing wastewater disposal facilities within the township, proposed facilities within the planning period and an overall plan for wastewater management. Various maps have been prepared to show existing and future service areas as well as identify planning restraints that were used to prepare this plan.

<table>
<thead>
<tr>
<th>TABLE 1</th>
<th>SUMMARY OF PROPOSED SIGNIFICANT ACTIVITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Abandonment of the Diamond Hill Sewage Treatment Plant (STP) and incorporation of the flows from the Diamond Hill sewer service area into the Hacketstown Municipal Utilities Authority (HMUA).</td>
</tr>
</tbody>
</table>

The Diamond Hill development was tied into the HMUA service area on February 16, 2005 due to repeated violations at the Diamond Hill STP.
2. Proposed 45,235 gallon per day (gpd) Groundwater Disposal Facility for Meadows at Mansfield.

Meadows at Mansfield consists of a proposed 226-unit adult residential community and a 6,000 square foot clubhouse. The project and the proposed wastewater facilities are located on Block 15.01, Lot 9.01 in Mansfield Township.

Meadows at Mansfield is proposed to exist in an "I" district boundary. Adult Retirement Communities are permitted in all zones provided certain conditions are met based upon the specific findings by the planning board (Ord 01-16). See the Mansfield Township Land Use Ordinances for further detail (Section 22-13.10).

3. Designation of areas within the Township as on-site groundwater disposal areas for facilities with planning flows of less than 2,000 gallons per day (gpd). Areas not identified as a specific STP future service area or designated as on-site groundwater disposal areas are for individual subsurface disposal systems with planning flows of less than 2,000 gpd.

4. Environmental analyses and assessments performed to designate specific areas within the Township as environmentally constrained areas. All necessary permits must be obtained prior to development in environmentally constrained areas. These analyses and assessments include, but are not limited to, the following:

<table>
<thead>
<tr>
<th>Environmental Analyses and Assessments</th>
</tr>
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<tbody>
<tr>
<td>a. Point Source Pollutant Loading Analysis.</td>
</tr>
<tr>
<td>b. Nonpoint Source Pollutant Loading Analysis.</td>
</tr>
<tr>
<td>c. Ground Water Quality Analysis.</td>
</tr>
<tr>
<td>d. Riparian Corridor Analysis.</td>
</tr>
<tr>
<td>e. Endangered/Threatened Species Analysis.</td>
</tr>
<tr>
<td>f. Environmental Build-Out Analysis.</td>
</tr>
</tbody>
</table>

5. Application of the nitrate dilution model for areas designated DGW < 2,000 gpd. Using a 5.2 mg/L NO3 level for an average household of 3 people per home, the minimum recharge areas to dilute the nitrate ranged from 1.5 acres per system to 1.9 acres per system. The R-2 and B-1 district minimum lot sizes are insufficient to dilute nitrate in onsite waste disposal system effluent to the 5.2 mg/L level.

Mansfield Township is currently communicating with the Hackettstown Municipal Utilities Authority (HMUA) in order to expand the HMUA service area in order to include the R-2 and B-1 district boundaries located in the southeastern portion of the Township (see section IV.D of this document for more details). In addition, the Township is implementing a septic management ordinance to cover the other R-2 district boundaries in the southwestern portion of Mansfield. This study area, which is outside of the HMUA Future Service Area, can be found in the Environmental Analyses & Assessments document.
II. EXISTING CONDITIONS

A. LOCATION

The Township of Mansfield is situated in the southeastern part of Warren County, northwestern New Jersey, west of the Town of Hackettstown. Mansfield Township is surrounded by Oxford Township, Liberty Township, and Independence Township to the north, all in Warren County; the Town of Hackettstown (Warren County) and Washington Township (Morris County) to the east. Lebanon Township (Hunterdon County) borders Mansfield to the south and Washington Township (Warren County) to the west. The Township of Mansfield contains approximately 30.5 square miles, or 19,520 acres. It is noted, however, that the 1974 and 1989 Master Plans for the Township used a figure of 18,976 acres (29.65 square miles) and the “New Jersey Municipal Data Book, 1996” indicates a total acreage for the Township of 19,161.6 acres (29.94 square miles). Consequently, comparisons of acreages and percentages between the various land use surveys of 1974, 1989 and the current analysis are not directly comparable.

B. TOPOGRAPHY

Mansfield Township lies within foothills of that part of the Appalachian Highlands known as the Kittatinny Range. The Upper Pohatcong Mountains run throughout Mansfield from northeast to southwest. The deep valleys of the Musconetcong River and the Pohatcong Creek cut through it in the same direction. The Musconetcong River is also the dividing line separating Mansfield from Morris and Hunterdon Counties. The Pequest River flows in a southwesterly direction in Liberty and Oxford Townships; the northwesterly portion of Mansfield lies within the Pequest Valley and drains to the Pequest River. There are a number of smaller streams and brooks flowing in Mansfield that empty into the Pohatcong Creek, Musconetcong River or Pequest River. The range of altitudes within Mansfield varies from a high elevation of just over 1,200 feet above sea level at the top of Pohatcong Mountain in the northeast area of the Township to about 360 feet above sea level in the Musconetcong River in the southern corner of the Township.

C. PHYSIOGRAPHY

The majority of Mansfield Township is situated in the Highlands geologic province. The Highlands are underlain predominantly by granite, gneiss, and small amounts of marble from the Precambrian age. These rocks, the oldest in New Jersey were formed between 1.3 billion and 750 million years ago by melting and recrystallization of sedimentary rocks that were deeply buried, subjected to high pressure and temperature, and intensely deformed. The extreme northern portion of Mansfield is situated in the Valley and Ridge province, which is underlain by faulted and folded sedimentary layers of sandstone, shale, and limestone.

D. ZONING

Land Use ordinances adopted by the Township are in place to regulate development. Zone District Boundaries
are shown on Map 4-Zoning which can be found in Appendix B of this Plan. Use regulations within the districts include descriptions of principle permitted use.

<table>
<thead>
<tr>
<th>TABLE 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>MANSFIELD TOWNSHIP ZONING</td>
</tr>
<tr>
<td>SUMMARY</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ZONE DESIGNATION</th>
<th>ZONE DESCRIPTION</th>
<th>MINIMUM LOT SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Single Family Res.</td>
<td>5 Acres</td>
</tr>
<tr>
<td>R-1</td>
<td>Single Family Res.</td>
<td>3 Acres</td>
</tr>
<tr>
<td>R-2</td>
<td>Single Family Res.</td>
<td>22,000 s.f.</td>
</tr>
<tr>
<td>R-3</td>
<td>Multi Family Res.</td>
<td>8 Acres (Apartment)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5 Acres (Townhouse)</td>
</tr>
<tr>
<td>B-1</td>
<td>Business</td>
<td>1 Acre</td>
</tr>
<tr>
<td>B-2</td>
<td>Commercial</td>
<td>Not Specified</td>
</tr>
<tr>
<td>I</td>
<td>Industrial</td>
<td>5 Acres</td>
</tr>
<tr>
<td>PO</td>
<td>Professional Office</td>
<td>5 Acres</td>
</tr>
<tr>
<td>-</td>
<td>Roads</td>
<td>N/A</td>
</tr>
</tbody>
</table>

In addition, the Hackettstown airport is located along Airport Road in the southeastern portion of Mansfield Township. It has a runway that is 2200 feet in length, which supports the use of B-1 type aircraft, according to the NJDOT Division of Aeronautics. B-1 type aircrafts are typically single-engine crafts that have a low passenger seating capacity. This excludes most types of commercial passenger service. At this time there are no plans to expand any portion of the airport.

The Master Plan and Land Use Ordinances for Mansfield Township provide more specific zoning information. This plan is consistent with the Township Master Plan, however, these documents are amended from time to time and may not correspond to the information presented in this WMP in the future.

E. POPULATION PROJECTIONS

Population projections for Mansfield Township are based upon projections of the Township as identified in the Master Plan adopted January 1999 and the State of New Jersey, Department of Labor and Workforce Development. The population of Mansfield has increased by 12.8% between 1990 and 2000, rising from 7,154 to 8,072 persons (see Table 3 below). Mansfield's population as a percentage of the total County...
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population has been increasing over the last four Census counts, however, only increased .1% over the last Census count from 1990-2000. Warren County total population projections from 2000-2020 shown in table 3 below have been taken from the State of New Jersey, Department of Labor. It is assumed from this data that Mansfield Township will average 7.9 to 8.0% of the County population over the planning period. The population growth is expected to average between 95 to 120 persons per year for the Township, further reinforcing the need for wastewater management planning.

| TABLE 3  
HISTORICAL & PROJECTED POPULATIONS, 1970-2030  
<table>
<thead>
<tr>
<th>Mansfield Twp.</th>
<th>Warren County</th>
<th>Twp. % of County</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td>3,546</td>
<td>73,960</td>
</tr>
<tr>
<td>% Change</td>
<td>+63.0%</td>
<td>+14.2%</td>
</tr>
<tr>
<td>1980</td>
<td>5,780</td>
<td>84,429</td>
</tr>
<tr>
<td>% Change</td>
<td>+23.8%</td>
<td>+8.5%</td>
</tr>
<tr>
<td>1990</td>
<td>7,154</td>
<td>91,607</td>
</tr>
<tr>
<td>% Change</td>
<td>+12.8%</td>
<td>+11.8%</td>
</tr>
<tr>
<td>2000</td>
<td>8,072*</td>
<td>102,433*</td>
</tr>
<tr>
<td>% Change</td>
<td>+15.0%</td>
<td>+13.2%</td>
</tr>
<tr>
<td>2010</td>
<td>9,280</td>
<td>116,000</td>
</tr>
<tr>
<td>% Change</td>
<td>+10.6%</td>
<td>+10.6%</td>
</tr>
<tr>
<td>2020</td>
<td>10,264</td>
<td>128,300</td>
</tr>
<tr>
<td>% Change</td>
<td>+10.1%</td>
<td>+11.5%</td>
</tr>
<tr>
<td>2030</td>
<td>11,301</td>
<td>143,055</td>
</tr>
</tbody>
</table>

* - US Census – Corrected Population

F. FUTURE GROWTH

In consideration of the Master Plan of the Township, future growth is anticipated to occur in the southern portion of Mansfield. As shown on Map 4-Zoning, the northern “A” land use category is the largest area of the Township. It constitutes 11,987 acres or 18.72 square miles (61% of the Township). It lies north of the railroad and covers the bulk of Mansfield to Oxford and Liberty Townships.

The “A” Single Family Residential zone is characterized by greater variation in topographic elevation with mountainous areas. The Pohatcong Creek bisects this area and contains the most significant wetlands and flood plains in the Township. Existing land use is sparsely developed with residences and farms. Total undeveloped (vacant and in farmland) acreage is 9,550+ acres. The county and state have large landholdings in this area of the township. Approximately 2,425 acres or 13% of the Township is public land: 1998 tax-exempt land that is held as open space, as follows:

<table>
<thead>
<tr>
<th>Site</th>
<th>Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>NJ State Lands</td>
<td>2,386</td>
</tr>
<tr>
<td>Kensington</td>
<td>19.0</td>
</tr>
<tr>
<td>Port Murray Rd Rec.</td>
<td>17.0</td>
</tr>
<tr>
<td>Misc. Excess Municipal Lands</td>
<td>164.7</td>
</tr>
</tbody>
</table>

The open space properties are illustrated on Map 5A-Environmental Features in Appendix B of this document.

There are a number of constraints to development in this portion of the township, including the geology with hydrologic limitations for wells (granites and gneisses), soil constraints, which limit the development of septic systems (the majority rated “severe” for septic suitability), and a poor road system as a result of the mountainous terrain. This area has no public water or sewer with the exception of the Warren Haven Nursing Home which is serviced by the Warren County Pequest River MUA (Oxford area STP).
Residential lot sizes or the density of development have a direct relationship to the resultant concentration of nitrates in ground water supplies. Mathematical models have been employed to determine appropriate lot sizes and density in order to attain a target level of nitrates in groundwater. Known as nitrate dilution models, these calculations consider aquifer recharge rates, natural denitrification rates, persons per family, wastewater generation per person, and initial nitrate concentration in the calculation of a resultant final nitrate concentration. Using the Recharge-Based Nitrate Dilution Model for New Jersey the minimum recharge areas needed to dilute the nitrate ranged from 1.5 acres per system to 1.9 acres per system in Mansfield Township. These calculations and associated maps can be found in the Environmental Analyses and Assessments document.

In addition, the entire northern “A” land use category has been placed under the preservation area of the Highlands Water Protection and Planning Act which was passed in 2004 in an attempt to protect half the states water supply along with other natural resources in the Highlands Region. Under this Act the Highlands Water Protection and Planning Council, consisting of 15 voting members, will be established and charged with the preparation of a regional master plan for the preservation area in the New Jersey Highlands as well as for the region in general.

With the entire northern part of Mansfield constrained and under preservation, the Township plans to grow in the least environmentally constrained parts of southern Mansfield.
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III. EXISTING WASTEWATER DISPOSAL FACILITIES

A. GENERAL

Sewage treatment and disposal within Mansfield Township is accomplished by either individual subsurface sewage disposal systems (ISSDS) or central collection treatment and disposal facilities. Mansfield Township relies predominantly upon ISSDS since the Township does not own any centralized sanitary sewage collection and treatment facilities. Presently there are seven (7) approved on-site facilities operating in the Township. Two (2) of these facilities are municipally owned and operated and five (5) facilities are privately owned and operated. Areas not included in the service area of a particular facility are designated areas of discharge to groundwater for facilities with planning flows of less than 2,000 gpd in accordance with NJAC 7:15-8, adopted March 20, 2001. All existing, new, or expanded industrial pretreatment facilities requiring Significant Indirect User (SIU) permits and/or Treatment Works approvals, and which are located within the specified sewer service area, are deemed to be consistent.

There are two (2) service areas within Mansfield Township. The Warren County Pequest River MUA Oxford STP serves the Warren Haven Nursing Home complex along Oxford Road, an area in the western portion of the Township. The Hackettstown Municipal Utilities Authority (HMUA) serves the northeast corner of the Township and the Diamond Hill Development. Due to repeated violations at the Diamond Hill Sewage Treatment Plant the HMUA has recently taken over the Diamond Hill sewer system. The Diamond Hill Sewage Treatment Plant has been abandoned and the Diamond Hill sewer service area was tied into HMUA on February 16, 2005.

These facilities and service areas are shown on Map 2-Existing Wastewater Facilities and Service areas. A Description of each facility is presented below. Additional detailed data is provided in the individual facility data sheets in Appendix A. Pre-existing grant conditions and requirements (from DEP grants or loans for sewerage facilities) which provide for restriction of sewer service to environmentally sensitive areas, are unaffected by adoption of this WMP and compliance is required.

B. DESCRIPTION OF EXISTING WASTEWATER DISPOSAL FACILITIES

Facility 1

Hackettstown MUA
NJ0021369

The Hackettstown Municipal Utilities Authority (HMUA) owns and operates a wastewater treatment plant located on Esna Drive adjacent to the Musconetcong River at the northwest extent of Washington Township. The treatment system was constructed during the early 1970’s to provide service to the Town of Hackettstown and several adjacent municipalities. The HMUA’s plant and current approved service area are located entirely within the Upper Delaware 208 Water Quality Management Planning Area. Its service area includes the Town of Hackettstown and portions of: Allamuchy, Independence, Mansfield, Mount Olive,
and Washington Townships. The Diamond Hill development was also tied into the HMUA service area on February 16, 2005 due to repeated violations at the Diamond Hill STP. The Diamond Hill STP NJPDES Permit was issued in 1987 in order to address the needs of the Diamond Hill Development. The Diamond Hill STP has been abandoned and the Diamond Hill sewer service area has been incorporated into the HMUA service area.

On November 17, 2003, the Department received the Diamond Hill Flow Data Summary Report submitted by the HMUA. Upon review of the submitted flow report, the Department approved an influent flow from the Diamond Hill sewer service area of 72,000 gallons per day (71,600 gpd rounded up). Therefore, the Department has proposed a major modification permit action to reduce the NJPDES permitted flow value for the HMUA from 3.48 MGD (equal to the original permitted flow of 3.3 MGD plus the design flow of the Diamond Hill STP of 0.18 MGD) to 3.372 MGD (equal to the original permitted flow of 3.3 MGD plus the influent flow value from the Diamond Hill sewer service area of 0.072 MGD).

The Mansfield portion of the HMUA service area is identified on Map 2-Existing Wastewater Facilities and Service Areas. For detailed information related to this facility please refer to the HMUA Wastewater Management Plan.

Facility 2
Oxford Area WTF (Warren County Pequest River MUA)
NJ0035483
The Oxford Area WTF is owned and operated by the Warren County MUA.

The facility is located on Pequest Rd in Oxford Township, however, its’ service area extends into the northern part of Mansfield Township in order to service the Warren Haven Nursing Home. The Warren Haven Nursing Home used to operate under its own NJPDES permit (NJ0098698), however, that facility has since been decommissioned and its’ flows incorporated into the Oxford Area WTF. The average daily flow for the Warren Haven Nursing Home is 35,000 gpd. The Oxford treatment plant has a design capacity of .5 MGD and presently treats 320,000 gpd, on average. Sanitary wastewater with industrial contribution is treated and discharged to the Pequest River via an outfall pipe.

Facility 3A
Borealis Compounds LLC
NJ0028657
Borealis Compounds LLC owns a facility at 176 Thomas Rd in Mansfield Township, which operates three permitted discharges. The permit listed above provides treatment for the compounding of purchased plastic resins. The design capacity of the facility is .354 MGD. From June 3rd through September 3rd 2004 the monthly average effluent flow was .278 MGD. The water that is treated is discharged to the Musconetcong River via an unnamed tributary. No increase in design flow is planned for this facility.

Facility 3B
Borealis Compounds LLC
NJ0101478
NJPDES permit NJ010478 is owned and operated by Borealis Compounds LLC as discussed above. This permit was issued in order to provide treatment for the compounding of purchased plastic
resins. The permitted design capacity of the facility is 900,000 gpd. The treated effluent is discharged to groundwater via an infiltration pond. No increase in design flow is planned for this facility.

**Facility 3C**  
**Borealis Compounds LLC**  
**NJG0142069**  
Borealis Compounds LLC located at 176 Thomas Rd. in Mansfield Township employs 110 employees. This permit was issued for sanitary wastewater (T1). This facility discharges sanitary wastewater to groundwater using a subsurface sewage disposal system, i.e. "septic system", whose aggregate daily design flow, in accordance with N.J.A.C. 7:9A, is in excess of 2,000 gallons per day (GPD). This septic system receives, treats and disposes of only sanitary wastewater.

**Facility 4**  
**Mansfield Twp Elem School**  
**NJG0108286**  
The Mansfield Township Elementary School was constructed in 1962. A NJPDES Septic System Discharge General Permit was issued in order to address the needs of the school. This facility consists of a school with a student capacity of approximately 860. A septic system with a 10,000 gallon septic tank followed by 8 seepage pits handles wastewater treatment and disposal. The system authorized by this permit is for sanitary waste only. This facility is owned and operated by the Mansfield Twp. Board of Education.

**Facility 5**  
**NYK Logistics & Megacarrier**  
**NJG0050601**  
NYK Logistics & Megacarrier (formerly Zeta Consumer Products) is located at 555 Route 57 East in Mansfield Township. This facility discharges sanitary wastewater to groundwater using a subsurface sewage disposal system, i.e. "septic system", whose aggregate daily design flow, in accordance with N.J.A.C. 7:9A, is in excess of 2,000 gallons per day (GPD). This septic system receives, treats and disposes of only sanitary wastewater.

**Facility 6**  
**Bartons West End Farms Inc.**  
**NJG0075345**  
Bartons West End Farms specializes in animal confinement systems and is located on Janes Caapel Rd in the northern section of Mansfield Township. This facility discharges sanitary wastewater to ground water using a subsurface sewage disposal system, i.e. "septic system", whose aggregate daily design flow, in accordance with N.J.A.C. 7:9A, is in excess of 2,000 gallons per day (GPD). Four (4) septic systems are maintained on-site. Systems 1 & 2 are traditional residential septic tanks (2) with disposal fields (2). Systems 3 & 4 are animal systems with mesh filters/screens and submersible pumps. The animal waste systems are pumped on average 7,500 gallons per month and the human waste systems are pumped once every two years.

**Facility 7**  
**Hillside Village**  
**NJG0062901**  
Hillside Village (formerly Happy Hill Mobil Park) is a mobile park located on
Oxford Rd in Mansfield Township. The mobile park includes 26 mobile home units and 1 single family residential unit. This facility discharges sanitary wastewater to groundwater using a subsurface sewage disposal system, i.e. "septic system", whose aggregate daily design flow, in accordance with N.J.A.C. 7:9A, is in excess of 2,000 gallons per day (GPD). This septic system receives, treats and disposes of only sanitary wastewater.
PAGE 4
IV. FUTURE SERVICE AREAS

A. PLANNING AREAS

Designated sewer service areas for Mansfield Township are divided into existing service areas and future service areas. Future service areas consist of areas approved for sewer service as part of this Wastewater Management Plan (WMP) which are not currently being serviced. The areas of future service have been determined by carefully evaluating the environmental considerations for providing service. The existing zoning, soils, potential growth areas, along with other factors within the Township were necessary for proper evaluation of future needs and conditions. The Township Committee and other planning groups were involved with the determinations for future service. All determinations were made consistent with the requirements of the NJDEP for the preparation of a WMP. The future condition is discussed separately and shown on Map 3-Future Wastewater Facilities and Service Areas. With the entire northern part of Mansfield constrained and under preservation, the Township plans to grow in the least environmentally constrained parts of southern Mansfield. The Township is currently communicating with the Hackettstown Municipal Utilities Authority (HMUA) in order to expand the HMUA service area along Airport Road and Route 57 (see section IV.D of this document for more details). This study area is outside of the approved Future Service Area shown on Map 3, located adjacent to the Diamond Hill development, which was tied into the HMUA service area on February 16, 2005. A Build-Out analysis for this study area was performed as part of a comprehensive Environmental Analysis and Assessment completed during the preparation of this WMP.

B. ENVIRONMENTALLY CONSTRAINED AREAS

Areas of the Township that have been shown on Maps 5A, 5B, and 5C to be part of environmentally constrained areas may be unsuitable for wastewater disposal facilities. All local, state and federal permits must be obtained prior to development in these environmentally constrained areas.

Development in areas mapped as wetlands, flood prone areas, designated river areas, or other environmentally sensitive areas may be subject to special regulation under Federal or State statutes or rules. Interested persons should check with the Department of Environmental Protection for the latest information. Depiction of environmental features is for general information purposes only, and shall not be construed to define the legal geographic jurisdiction of such statutes or rules.

1) Floodplains

The designated and mapped floodways for the principal rivers and streams within the Township are shown on Map 5A- Environmental Features. The Township includes the Musconetcong River, as a boundary, the Pohatcong Creek, and the Pequest River, along with many brooks and unnamed tributaries for each stream. All streams within the Township are classified FW2-NJ. The
Township is underlain by three (3) separate bedrock aquifers. The Jacksonburg Limestone, Kittatinny Supergroup and Hardyston Quartzite bedrock aquifer (ijkh) can be found throughout the entire Township. The Igneous and Metamorphic rocks (imr) extend from central to northern Mansfield. The Martinsburg Formation and Jurland Sequence (mfjs) can be found in southern Mansfield. The areas that have been shown on Map 5A- Environmental Features include the floodway determined for a 100-year flood event. The delineation shown was obtained from Flood Hazard Mapping based upon Federal Emergency Management Agency National Flood Insurance Program. Designation of the floodways is in accordance with NJDEP delineated streams. The 100-year event utilized defines an event, which has a one-percent chance of occurring in any one-year period. “Floodways” is defined by the Bureau of Floodplain Management as “the channel of a natural stream and portions of the flood hazard area adjoining the channel, which are reasonably required to carry, and discharge the floodwater or flood flow of any natural stream”. “Floodplain” is defined as “the relatively flat area adjoining the channel of a natural stream, which has been or may be hereafter covered by flood water”.

2) Wetlands

Identified wetlands within the Township have been recorded and mapped by the New Jersey Department of Environmental Protection. The Freshwater Wetlands includes lands known as swamps, marshes, bogs, etc. The wetlands have been shown on Maps 5A and 5C. Generally speaking, most of the wetlands designated in the Township occur within or near floodplains of the various streams and rivers. Freshwater Wetlands are ecologically important because they serve as wildlife habitats providing food, shelter and breeding areas for many species of animals, birds and fish. The Freshwater Wetlands also aid in flood control in that they store water to be released slowly to a stream. Principally, they act as groundwater recharge areas allowing water to seep through the soil into the aquifers below.

3) Stream Corridors

Stream corridors are depicted on Map 5A-Environmental Features. The Musconetcong River and the Pohatcong Creek cut through the Township from the northeast to the southwest. The Musconetcong River is also the dividing line separating Mansfield from Morris and Hunterdon Counties. The Pequest River flows in a southwesterly direction in Liberty and Oxford Townships. The northwesterly portion of Mansfield lies within the Pequest Valley and drains to the Pequest River. There are a number of smaller streams and brooks flowing in Mansfield that empty into the Pohatcong Creek, Musconetcong River or Pequest River. The stream corridor, or area of concern, for the purpose of this WMP, shall equal the Special Water Resource Protection Area for Category One (C1) waters and shall be measured as defined at N.J.A.C. 7:8-5.5(h). For areas adjacent to surface water bodies designated Category Two (C2) Waters for Trout Production (FW2-TP) the Riparian Buffer Conservation Zone (RBCZ) shall be measured from the defined edge of the perennial stream, or
centerline if the bank is not defined, and from the edge of a lake, pond or reservoir at bank-full flow level, and shall extend 150 feet horizontally outward from the perpendicular. For areas adjacent to other surface water bodies the RBCZ shall extend 75 feet horizontally outward from the perpendicular. The objective of no loss of value can be achieved by ensuring that there is no disturbance within the applicable 75, 150 or 300-foot area of concern.

In addition, the Township has adopted an updated stream corridor protection ordinance to protect the riparian corridor areas (Appendix C).

4) Wild and Scenic Rivers

A wild and scenic river system within the State of New Jersey is administered by the NJDEP. No rivers, streams, creeks, runs or small lakes within the Township are presently included in the New Jersey Wild and Scenic River Program; however, the Musconetcong River is currently being studied by the State for consideration.

5) Water Supply

The majority of Mansfield Township uses individual wells for water supply.

The New Jersey American Water Company (NJAWC) provides the Anderson development with water using two (2) on-site wells. This development is located in southern Mansfield near the proposed Meadows at Mansfield property.

The Diamond Hill Water Company used to provide the Diamond Hill development with water using three (3) on-site wells. These wells are now owned and operated by the HMUA. The HMUA provides sewer and water within its' service area shown on Map 3- Future Wastewater Facilities and Service Areas.

The Warren Haven Nursing Home, serviced by the Warren County Pequest River MUA (Oxford WTF), receives its water from two (2) on-site wells with an existing allocation of 40,000 gpd.

Water is proposed to be supplied to the Meadows at Mansfield development by the NJAWC from existing wells under an existing water allocation. A Construction Permit (WCP040001), dated August 27th, 2004 was issued for this project by the Department of Environmental Protection- BSDW. The firm source capacity for the New Jersey American Water System is 2.095 MGD while the projected peak daily demand is 1.468 MGD.

6) Point Source Pollutant Loading: Surface Water Discharges

As part of this WMP the Diamond Hill STP (DSW: Hancees Brook, FW2-TP) has been abandoned and the Diamond Hill sewer service area has been incorporated into the HMUA service area (DSW: Musconetcong River, FW2-TM).

On November 17, 2003, the Department received the Diamond Hill Flow Data Summary Report submitted by the HMUA. Upon review of the submitted flow report, the Department approved an influent flow from the Diamond Hill sewer service area of 72,000 gallons per
day (71,600 gpd rounded up). Therefore, the Department will propose a major modification permit action to reduce the NJPDES permitted flow value for the HMUA from 3.48 MGD (equal to the original permitted flow of 3.3 MGD plus the design flow of the Diamond Hill STP of 0.18 MGD) to 3.372 MGD (equal to the original permitted flow of 3.3 MGD plus the influent flow value from the Diamond Hill sewer service area of 0.072 MGD).

In a meeting with NJDEP, held on March 29th 2004, it was decided that an antidegradation analysis would not be required as part of this WMP since the Diamond Hill service area is being handled within existing allocated capacity. However, any new flows in the sewer service area may trigger the need for antidegradation analysis.

7) Point Source Pollutant Loading: Discharge to Groundwater Areas

As new or expanded discharges are proposed, areas designated for DGW > 2,000 gallons per day (gpd) must be evaluated through the NJPDES permitting process.

For areas designated DGW < 2,000 gpd, the nitrate dilution model has been utilized. The recommended septic density map along with all of the detailed calculations and assumptions can be found in the Environmental Analyses & Assessments document. From the 2000 Census, Mansfield Township had a population density of 2.76 people per home. Using a 5.2 mg/L NO₃ level for an average household of 3 people per home, the minimum recharge areas needed to dilute the nitrate ranged from 1.5 acres per system to 1.9 acres per system. As illustrated in table 2 above, the minimum lot size required in zoning district R-2 is 22,000 sq. ft. This lot size is insufficient to dilute nitrate in onsite waste disposal system effluent to the 5.2 mg/L level. The R-2 district boundaries are located in southern portion of Mansfield. The majority of the R-2 district areas in the southeast section of Mansfield are currently serviced by the HMUA. In addition, The Township is currently communicating with the HMUA in order to expand the HMUA service area along Airport Road and Route 57, adjacent to the Diamond Hill development, covering all of the R-2 district boundaries in the southeastern portion of the Township (see section IV.D of this document for more details on this study area). The Township of Mansfield is implementing a septic management ordinance to cover other R-2 district boundaries as part of this WMP (Appendix C).

The minimum lot size required in zoning district B-1 is 1 acre. The B-1 zone is a single area located southeast of Route 57, adjacent to Washington Township in Morris County. This area is part of the area that the Township is currently speaking with the HMUA about.

8) Nonpoint Source Pollutant Loading

The runoff from farms and developed properties is a major source of nonpoint source pollutants. Nonpoint inputs are difficult to measure and regulate because of their dispersed origins and because they vary with the seasons and the weather. Suspended Solids, Phosphorus, Nitrogen, oils and Grease, as well as
other pollutants associated with the runoff cause a wide range of problems, including toxic algal blooms, loss of oxygen, fish kills, loss of aquatic vegetation and loss of biodiversity.

Executive Order 109 requires that a nonpoint source pollutant loading analysis is necessary for all new expanded sewer service areas. The analysis shall determine the pre- and post-development stormwater pollutant loading rates and identify best management practices that would reduce the pre-development pollutant loading to the pre-development pollutant loading. Total Suspended Solids removal rates for BMPs are shown in Table 4.

<table>
<thead>
<tr>
<th>Best Management Practices</th>
<th>TSS % Removal Rate</th>
</tr>
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<tr>
<td>Bioretention Systems</td>
<td>90</td>
</tr>
<tr>
<td>Constructed Stormwater Wetland</td>
<td>90</td>
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<tr>
<td>Forested Buffers</td>
<td>70</td>
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<td>Extended Detention Basins</td>
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<tr>
<td>Infiltration Structure</td>
<td>80</td>
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<tr>
<td>Manufactured Treatment Device</td>
<td>See N.J.A.C. 7:8-5.7(c)</td>
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<tr>
<td>Sand Filter</td>
<td>80</td>
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<tr>
<td>Vegetative Filter Strip</td>
<td>50</td>
</tr>
<tr>
<td>Wet Pond</td>
<td>60-90</td>
</tr>
</tbody>
</table>

A Nonpoint Source Pollutant Loading analysis has been completed for the proposed Meadows at Mansfield development. Post-development conditions yield a decrease in total suspended solids (TSS), total nitrogen (TN), and total phosphorus (TP) in comparison to pre-development conditions. Post-development loadings are less than pre-development loadings. The proposed development therefore complies with the 'no-net impact' objective.

9) Endangered and Threatened Species Habitats

Landscape Project Maps, developed by the NJDEP – Division of Fish and Wildlife (DFW), have been utilized to assist in the identification of endangered and/or threatened species habitat within Mansfield Township. These maps have been created using an extensive database that combines rare species location information with land use/land cover classification data. The Landscape Project focuses on large land areas called "landscape regions" that are ecologically similar with regard to their plant and animal communities. Mansfield Township falls within the Skylands Region which encompasses all of Sussex, Warren, Hunterdon, Passaic and Morris counties and parts of Somerset and Bergen counties. The region contains extensive tracts of contiguous upland and wetland forests that support diverse animal populations including red-shouldered hawks, goshawks, cerulean warblers, timber rattlesnakes and long tailed salamanders. Bog turtles and great blue herons inhabit the extensive freshwater wetland systems.
found throughout the region. Critical habitats of concern are areas identified that support or potentially support species that are Rank 5 (Federal endangered and/or threatened species), Rank 4 (State endangered species), or Rank 3 (State threatened species). Landscape Project Areas 3, 4, & 5 are shown on Map 5C-Environmental Features: Landscape Project Areas 3, 4 & 5. There are no areas ranked 3, 4, or 5 for Emergent Wetland, Beach, Peregrine Falcon Nesting, or Bald Eagle Foraging. There are, however, areas ranked 1 (Suitable Habitat) & 2 (Priority Species) for Emergent Wetland.

10) Public Open Space and Recreational Areas

Parks and public lands within the Township are shown on Map- 5A Environmental Features as Open Space. The information pertaining to the parks and public lands was obtained from the Township Master Plan. Parklands are not, by definition, environmentally sensitive areas but often contain lands that are considered sensitive.

11) Limestone

There are four limestone formations that run through the southeastern portion of Mansfield Township; each is located along the border of the Bushkill Member formation in that region. The limestone formations are depicted on Map 7 as Bedrock Geology type 12- Jacksonburg Limestone. Subdivisions and site plans which are submitted within the Township are required to provide environmental impact analysis for each site at the time of submittal. At the time of the submission limestone areas are identified on that map. In addition, as part of the subdivision process soils data for all roadways are required to be submitted. Based on this information additional testing is required pursuant to the requirements in the ordinances that allow the Board to require any additional information which it may deem appropriate to make an informed decision. The extent of the additional investigation required is based on the various parameters of the subdivision/site plan design to provide a reasonable basis for decision making.

12) Historic Sites

The Township of Mansfield has a Historic Preservation Plan which can be found in the Master Plan. The Historic Preservation Plan Element is a plan that considers the importance of historic sites and structures, and the historic districts of the Township. These are shown on Map 6- Mansfield Township Historic Sites & Structures in Appendix B of this document. The Township currently has a number of historic buildings, and the town historic districts of Beattystown and Port Murray, both of which are on the New Jersey and National Register of Historic Places.

As development applications are reviewed, whether for subdivision or site plan, the Planning and Zoning Boards should consider their impact on the historic sties and districts (as shown in the appended map.) Efforts to preserve these buildings and places should be made in concert with the landowners and developers.
C. FUTURE WASTEWATER DISPOSAL FACILITIES

1) General

This WMP is intended to identify and address present, as well as, the anticipated 20-year wastewater management needs of the Township. The Township anticipates that growth will continue well into the future. This is supported by Township’s Master Plan and zoning ordinances which permits the development of single family dwellings on lot sizes conducive to individual subsurface sewage disposal systems with greater densities encouraged only in those areas where greater infrastructure presently exists (or can be provided), and environmental constraints do not override the practicability of development. Development within the Township based upon existing zoning will dictate the type of facilities to be provided. All facilities will be in accordance with NJAC 7:9A and 7:14A and all Township Board of Health Regulations.

Due to repeated violations the Diamond Hill STP (a surface water discharge facility) has been abandoned and the flows have been conveyed to another existing surface water discharge facility (HMUA). In addition, a 45,235-gallon per day (gpd) Groundwater Disposal Treatment Facility is being proposed in the southern part of Mansfield (Meadows at Mansfield). The future service areas and facilities are shown on Map 3- Future Wastewater Facilities and Service Areas.

2) On-Site Groundwater Disposal Area Options

The options available for on-site groundwater disposal areas include individual subsurface sewage system technologies and other on-site groundwater disposal systems with planning flows of less than 2,000 gpd. Alternatives for treatment systems are also varied depending upon the specific criteria brought by discharge requirements. The specific selection of a treatment option will be based upon site-specific information to be provided by the person or persons proposing the construction of the treatment system.

3) Individual Subsurface Sewage Disposal Systems

Individual subsurface sewage disposal systems will be accepted as the preferred means of on-site wastewater disposal. The evaluation, design and construction of a system must be considered within the requirements of the Township Board of Health and the NJDEP requirements for individual subsurface sewage disposal systems. The selection of the most appropriate system will be predicted upon site-specific conditions as required by the Township Board of Health and NJDEP requirements.

Individual subsurface sewage disposal systems (ISSDS) for individual residences can only be constructed in depicted sewer service areas if legally enforceable guarantees are provided, before such construction, that use of such systems will be discontinued when the depicted sewer service becomes available. This applies to ISSDS that require certification from the
4) Treatment Systems

Certain treatment systems, including recycling systems, will require Treatment Works Approval permits and NJPDES Permits from NJDEP. It will be the responsibility of the applicant to file for and obtain the necessary permits from the NJDEP prior to final acceptance of the systems by the Township Board of Health. The Township prior to review and approval by the NJDEP, must approve applications to the NJDEP for NJPDES and TWA Permits. The Township will only endorse applications submitted to NJDEP for facilities located in areas where the proposed system is necessary in order to construct or improve a residential or commercial structure that is consistent with the existing zoning ordinance of the Township.

All existing, new, or expanded industrial pretreatment facilities requiring Significant Indirect User (SIU) permits and/or Treatment Works approvals, and which are located within the specified sewer service area, are deemed to be consistent.

D. DESCRIPTION OF FUTURE DISPOSAL FACILITIES

Facility 1

Hackettstown MUA
NJ0021369

The Hackettstown Municipal Utilities Authority (HMUA) services includes the Town of Hackettstown and portions of: Allamuchy, Independence, Mansfield, Mount Olive, and Washington Townships. The HMUA has recently taken over the Diamond Hill STP and the currently serviced lots in the Diamond Hill sewer service area have been incorporated into the HMUA STP service area.

The Future Service Area for the HMUA as shown on Map 3 includes the Sunny View Development, Donaldson Farm and other portions of the R-1 district boundaries. Projected wastewater flows for the Future Service Area are estimated at 48,825 gallons per day (gpd) or .049 million gallons per day (MGD) as shown in the HMUA facility table. The Sunny View Development is projected to contribute 27,675 gpd while Donaldson Farm and the remainder of the R-1 district boundary is projected to contribute 21,150 gpd. Wastewater flow estimates are based upon an estimated 75 gallons per day per capita with an average of three (3) persons per household for a total flow of 225 gpd per household. Projected flows assume full development under existing zoning using the municipal zoning map and applicable ordinances.

In addition, the Township is currently communicating with HMUA in order to expand the HMUA future service area along Airport Road and Route 57,
MANSFIELD TOWNSHIP
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WASTEWATER MANAGEMENT PLAN

adjacent to the Diamond Hill development. This study area, which is outside of the Future Sewer Service Area discussed above, covers zone district boundary B-1 along with sections of R-1 and R-2 along Airport Road and Route 57 in the southeastern part of the Township. The amount of additional wastewater flow which could be generated, if serviced, is estimated to be 161,204 gpd. However, this wastewater management plan will need to be amended, in accordance with the Statewide Water Quality Management Planning rules (N.J.A.C. 7:15), before any portion of the study area can be included in the Future Sewer Service Area.

Facility 2
Oxford Area WTF (Warren County Pequest River MUA)
NJ0035483

The Oxford Area WTF and service area within Mansfield Township will remain unchanged.

Facility 3A
Borealis Compounds LLC
NJ0028657

Borealis Compounds LLC currently discharges a monthly average effluent flow of .278 MGD. Over the next twenty (20) years the facility plans to increase productivity and discharge up to the design capacity of .354 MGD.

Facility 3B
Borealis Compounds LLC
NJ0101478

Borealis Compounds LLC currently discharges a monthly average effluent flow of .278 MGD. Over the next twenty (20) years the facility plans to increase productivity and discharge up to a maximum of .354 MGD under NJPDES permit NJ0101478.

Facility 3C
Borealis Compounds LLC
NJG0142069

Borealis Compounds LLC currently employs 110 employees. The facility plans to increase productivity over the planning period and employ up to a maximum of 125 employees.

Facility 4
Mansfield Twp Elem School
NJG0108286

The Mansfield Township Elementary School will have a maximum of 800 students over the next twenty (20) years.

Facility 5
NYK Logistics & Megacarrier
NJG0050601

NYK Logistics & Megacarrier (formerly Zeta Consumer Products) will employ up to a maximum of 150 employees over the next twenty (20) years.

Facility 6
Bartons West End Farms Inc.
NJG0075345

Bartons West End Farms will remain unchanged.

Facility 7
Hillside Village
NJG0062901

Hillside Village (formerly Happy Hill Mobil Park) will remain unchanged.

Facility 8
Meadows at Mansfield
TBD

Meadows at Mansfield consists of a proposed 226-unit adult residential community and a 6,000 square foot
MANSFIELD TOWNSHIP  
WARREN COUNTY  
WASTEWATER MANAGEMENT PLAN

clubhouse. The project and the proposed wastewater facilities are located on Block 15.01, Lot 9.01 in Mansfield Township. Meadows at Mansfield is proposed to exist in an “I” district boundary. Adult Retirement Communities are permitted in all zones provided certain conditions are met based upon the specific findings by the planning board (Ord 01-16). See the Mansfield Township Land Use Ordinances for further detail (Section 22-13.10). The total projected flow in accordance with the criteria at NJAC 7:14A-23.3 is estimated to be 45,235 gallons per day. Originally, a 300-unit development was proposed in the pre-application, but the proposed development has since been reduced to 226 units. The NJDEP letter identified issues associated with the project related to the northern section of the project including threatened and endangered species habitat and the Morris Canal historic site. The northern section has been removed from the proposed project. The proposed wastewater treatment facility will employ an advanced process treatment plant to treat wastewater on-site to GW II standards for nitrogen. The treated water will be recharged to groundwater on-site. Fecal Coliform will be removed to non-detect levels within the disposal beds. The development plan includes a clubhouse, 113 residential units with 3 bedrooms, and 113 units with 2 bedrooms. Projected wastewater flows from the residential development are 170 gpd for each 2-bedroom unit, 225 gallons per day for each 3-bedroom unit, and 0.1 gallons per day per square foot or 600 gallons per day for the proposed 6,000 square foot clubhouse. Total projected flow for the Meadows at Mansfield is thus projected to be 45,235 gpd as illustrated in the following table.

Water is proposed to be supplied to the Meadows at Mansfield development by the NJAWC from existing wells under an existing water allocation. A Construction Permit (WCP040001), dated August 27th, 2004 was issued for this project by the Department of Environmental Protection. The firm source capacity for the New Jersey American Water System is 2.095 MGD while the projected peak daily demand is 1.468 MGD.

Executive Order 109 Analyses for the Meadows at Mansfield Project can be found in the Environmental Analyses & Assessments document. These analyses include Nonpoint Source Pollutant Loading Analysis, Riparian Corridor Analysis, Consumptive Water Use Analysis, Point Source Pollutant Loading Analysis, and Threatened and Endangered Species Analysis.
WASTEWATER MANAGEMENT PLAN
DESCRIPTION OF WASTEWATER TREATMENT FACILITIES
FACILITY NUMBER 1
Hackettstown Municipal Utilities Authority

1. Existing or Proposed Facility: Existing
2. NJPDES Permit Number: NJ0021369
3. Discharge to Ground Water (DGW) or Surface Water (DSW): DSW
4. Name of Receiving Water or Aquifer: Musconetcong River
5. Classification of Receiving Water or Aquifer: FW2-TM
6. Owner of Facility: Hackettstown MUA
7. Operator of Facility: Hackettstown MUA
8. Co-Permittee of Facility: N/A
9. Location of Facility:
   b. Street Address: Esna Drive
   c. Block(s): 30 Lot(s): 71.02
10. Location of Discharge (i.e. degrees, minutes, seconds):
    a. 74.50.7 Longitude
    b. 40.49.7 Latitude
    or c. State Plane Coordinates:
11. Present Permitted Flow or Permit Condition or Daily Maximum: 3.372 MGD
12. Present Design Capacity of Facility: 3.372 MGD
13. Summary of Population Served / to be Served Including Major Seasonal Fluctuations:
    |-----------------|---------------|---------------|
    | Mansfield Twp.  | 5000          | 5550          |

    TOTAL 5000 5550

14. Summary of Wastewater Flow Received / to be Received Expressed in Million Gallons Per Day (mgd)
    and as a 30-Day Average Flow for DSW or a Daily Maximum Flow for DGW:
    |-----------------|---------------|---------------|
    | Mansfield Twp.  | 0.342 MGD     | 0.391 MGD     |
    a. Residential Flow
    b. Commercial Flow
    c. Industrial Flow
    d. Infiltration / Inflow
    TOTAL 0.342 MGD* 0.391 MGD**

NOTE: * Represents Mansfield Township portion of flow only.
** Represents Mansfield Township portion of flow only. Future flow includes projected flow from the Sunny View Development, Donaldson Farm and the remainder of R-1 district boundary within the approved Future Service Area.
# Wastewater Management Plan

**Description of Wastewater Treatment Facilities**

**Facility Number 2**

Oxford Area WEF (Warren County Pequest River MJUA)

<p>| | |</p>
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<thead>
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<tbody>
<tr>
<td>1.</td>
<td>Existing or Proposed Facility: Existing</td>
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<tr>
<td>2.</td>
<td>NJPDES Permit Number: NJ0035483</td>
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<td>3.</td>
<td>Discharge to Ground Water (DGW) or Surface Water (DSW): DSW</td>
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<tr>
<td>4.</td>
<td>Name of Receiving Water or Aquifer: Furnace Brook</td>
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<td>5.</td>
<td>Classification of Receiving Water or Aquifer: FW2-NT</td>
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<tr>
<td>6.</td>
<td>Owner of Facility: Warren County MUA</td>
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<td>7.</td>
<td>Operator of Facility: Warren County MUA</td>
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<tr>
<td>8.</td>
<td>Co-Permittee of Facility: N/A</td>
</tr>
<tr>
<td></td>
<td>b. Street Address: 148 Pequest Road</td>
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<td></td>
<td>c. Block(s): 25 Lot(s): 1</td>
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<td>10.</td>
<td>Location of Discharge (i.e. degrees, minutes, seconds):</td>
</tr>
<tr>
<td></td>
<td>a. 74.59.7 Longitude</td>
</tr>
<tr>
<td></td>
<td>b. 40.49.20 Latitude</td>
</tr>
<tr>
<td></td>
<td>or c. State Plane Coordinates:</td>
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<td>11.</td>
<td>Present Permitted Flow or Permit Condition or Daily Maximum: 0.5 MGD</td>
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<td>12.</td>
<td>Present Design Capacity of Facility: 0.5 MGD</td>
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<td>13.</td>
<td>Summary of Population Served / to be Served Including Major Seasonal Fluctuations:</td>
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<tr>
<td>Mansfield Twp</td>
<td>500</td>
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<td>TOTAL</td>
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<td>14.</td>
<td>Summary of Wastewater Flow Received / to be Received Expressed in Million Gallons Per Day (mgd) and as a 30- Day Average Flow for DSW or a Daily Maximum Flow for DGW:</td>
</tr>
<tr>
<td>Mansfield Twp</td>
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</tr>
<tr>
<td>a. Residential Flow</td>
<td>0.035 MGD</td>
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<tr>
<td>b. Commercial Flow</td>
<td></td>
</tr>
<tr>
<td>c. Industrial Flow</td>
<td></td>
</tr>
<tr>
<td>d. Infiltration / Inflow</td>
<td>0.035 MGD*</td>
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<tr>
<td>Total</td>
<td>0.035 MGD*</td>
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</tbody>
</table>

**Note:** *Represents Mansfield Township portion of flow only.*
### WASTEWATER MANAGEMENT PLAN

**DESCRIPTION OF WASTEWATER TREATMENT FACILITIES**

**FACILITY NUMBER 3A**

Borealis Compounds LLC

---

1. Existing or Proposed Facility: **Existing**
2. NJPDES Permit Number: **NJ0028657**
3. Discharge to Ground Water (DGW) or Surface Water (DSW): **DSW**
4. Name of Receiving Water or Aquifer: **Musconetcong River**
5. Classification of Receiving Water or Aquifer: **FW2-TM**
6. Owner of Facility: **Borealis Compounds LLC**
7. Operator of Facility: **Borealis Compounds LLC**
8. Co-Permittee of Facility: **N/A**
9. Location of Facility:
   - a. Municipality: **Mansfield Twp**
   - b. Street Address: **176 Thomas Rd**
   - c. Block(s): **1301**
   - d. Lot(s): **1**
   - e. County: **Warren**
10. Location of Discharge (i.e., degrees, minutes, seconds):
    - a. **74°53’15” Longitude**
    - b. **40°48’36” Latitude**
    - c. **State Plane Coordinates:**
11. Present Permitted Flow or Permit Condition or Daily Maximum: **0.354 MGD**
12. Present Design Capacity of Facility: **0.354 MGD**
13. Summary of Population Served / to be Served Including Major Seasonal Fluctuations:

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<thead>
<tr>
<th></th>
<th></th>
<th></th>
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<tbody>
<tr>
<td>Mansfield Twp</td>
<td>110 Employees</td>
<td>125 Employees</td>
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</table>
|                | 200,000 sq. ft.| 200,000 sq. ft.|**TOTAL**

14. Summary of Wastewater Flow Received / to be Received Expressed in Million Gallons Per Day (mgd) and as a 30-Day Average Flow for DSW or a Daily Maximum Flow for DGW:

<table>
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<tr>
<td>Mansfield Twp</td>
<td><strong>278 MGD</strong></td>
<td><strong>354 MGD</strong></td>
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<tr>
<td>a. Residential Flow</td>
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<td>b. Commercial Flow</td>
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<tr>
<td>c. Industrial Flow</td>
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</tr>
<tr>
<td>d. Infiltration / Inflow</td>
<td><strong>278 MGD</strong></td>
<td><strong>354 MGD</strong></td>
</tr>
</tbody>
</table>

**Total**
**WASTEWATER MANAGEMENT PLAN**

**DESCRIPTION OF WASTEWATER TREATMENT FACILITIES**

**FACILITY NUMBER 3B**

Borealis Compounds LLC

<table>
<thead>
<tr>
<th>1. Existing or Proposed Facility:</th>
<th>Existing</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. NIPDES Permit Number:</td>
<td>NJ0101478</td>
</tr>
<tr>
<td>3. Discharge to Ground Water (DGW) or Surface Water (DSW):</td>
<td>DGW</td>
</tr>
<tr>
<td>4. Name of Receiving Water or Aquifer:</td>
<td>Martinsburg Formation and Jutland Sequence</td>
</tr>
<tr>
<td>5. Classification of Receiving Water or Aquifer:</td>
<td>GW - IIA</td>
</tr>
<tr>
<td>6. Owner of Facility:</td>
<td>Borealis Compounds LLC</td>
</tr>
<tr>
<td>7. Operator of Facility:</td>
<td>Borealis Compounds LLC</td>
</tr>
<tr>
<td>8. Co-Permittee of Facility:</td>
<td>N/A</td>
</tr>
<tr>
<td>9. Location of Facility:</td>
<td>Mansfield Twp</td>
</tr>
<tr>
<td></td>
<td>County: Warren</td>
</tr>
<tr>
<td></td>
<td>176 Thomas Rd</td>
</tr>
<tr>
<td></td>
<td>Lot(s): 1</td>
</tr>
<tr>
<td>10. Location of Discharge (i.e. degrees, minutes, seconds):</td>
<td>a. 74.53.15 Longitude  b. 40.48.86 Latitude</td>
</tr>
<tr>
<td></td>
<td>or c. State Plane Coordinates:</td>
</tr>
<tr>
<td>11. Present Permitted Flow or Permit Condition or Daily Maximum:</td>
<td>0.9 MGD</td>
</tr>
<tr>
<td>12. Present Design Capacity of Facility:</td>
<td>0.9 MGD</td>
</tr>
<tr>
<td>13. Summary of Population Served / to be Served Including Major Seasonal Fluctuations:</td>
<td>Mansfield Twp</td>
</tr>
<tr>
<td></td>
<td>110 Employees</td>
</tr>
<tr>
<td></td>
<td>200,000 sq. ft.</td>
</tr>
</tbody>
</table>

**TOTAL:**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mansfield Twp</td>
<td>110 Employees</td>
<td>125 Employees</td>
</tr>
<tr>
<td></td>
<td>200,000 sq. ft.</td>
<td>230,000 sq. ft.</td>
</tr>
</tbody>
</table>

14. Summary of Wastewater Flow Received / to be Received Expressed in Million Gallons Per Day (mgd) and as a 30-Day Average Flow for DSW or a Daily Maximum Flow for DGW:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mansfield Twp</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Residential Flow</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Commercial Flow</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Industrial Flow</td>
<td>.278 MGD</td>
<td>.354 MGD</td>
</tr>
<tr>
<td>d. Infiltration / Inflow</td>
<td>.278 MGD</td>
<td>.354 MGD</td>
</tr>
<tr>
<td>Total</td>
<td>.278 MGD</td>
<td>.354 MGD</td>
</tr>
</tbody>
</table>
# WASTEWATER MANAGEMENT PLAN

**DESCRIPTION OF WASTEWATER TREATMENT FACILITIES**

**FACILITY NUMBER: 3C**

Borealis Compounds LLC

1. **Existing or Proposed Facility:** Existing
2. **NIPDES Permit Number:** NJCD0142069
3. **Discharge to Ground Water (DGW) or Surface Water (DSW):** DGW
4. **Name of Receiving Water or Aquifer:** Martinsburg Formation and Jutland Sequence
5. **Classification of Receiving Water or Aquifer:** GW - IIA
6. **Owner of Facility:** Borealis Compounds LLC
7. **Operator of Facility:** Borealis Compounds LLC
8. **Co-Permittee of Facility:** N/A
9. **Location of Facility:**
   - a. **Municipality:** Mansfield Twp
   - b. **Street Address:** 176 Thomas Rd
   - c. **Block(s):** 1301
   - d. **Lot(s):** 1
10. **Location of Discharge (i.e., degrees, minutes, seconds):**
   - a. **Longitude:** 74°53'15"
   - b. **Latitude:** 40°48'36"
11. **Present Permitted Flow or Permit Condition or Daily Maximum:** T1 Sanitary Wastewater
12. **Present Design Capacity of Facility:** >2,000 gpd
13. **Summary of Population Served / to be Served Including Major Seasonal Fluctuations:**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mansfield Twp</td>
<td>110 Employees</td>
<td>125 Employees</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

14. **Summary of Wastewater Flow Received / to be Received Expressed in Million Gallons Per Day (mgd) and as a 30-Day Average Flow for DSW or a Daily Maximum Flow for DGW:**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mansfield Twp</td>
<td>1,650 gpd</td>
<td>1,875 gpd</td>
</tr>
<tr>
<td>a. Residential Flow</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Commercial Flow</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Industrial Flow</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Infiltration / Inflow</td>
<td>1,650 gpd*</td>
<td>1,875 gpd*</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NOTE:** *Present and future wastewater flows are based on a planning flow of 15 gpd/employee.*
# Wastewater Management Plan

**Description of Wastewater Treatment Facilities**

**Facility Number: 4**

Mansfield Twp Elem School

1. **Existing or Proposed Facility:** Existing
2. **NJDEP Permit Number:** NJG0108286
3. **Discharge to Ground Water (DGW) or Surface Water (DSW):** DGW
4. **Name of Receiving Water or Aquifer:** Jacksonburg Limestone, Kittatinny Supergroup, Hardyston Quarzite
5. **Classification of Receiving Water or Aquifer:** GW - IIA
6. **Owner of Facility:** Mansfield Twp Board of Education
7. **Operator of Facility:** Mansfield Twp Board of Education
8. **Co-Permittee of Facility:** N/A
9. **Location of Facility:**
   a. **Municipality:** Mansfield
   b. **Street Address:** Port Murray Rd & Rt 57
   c. **Block(s):** 15.02
   d. **Lot(s):** 4
10. **Location of Discharge (i.e., degrees, minutes, seconds):**
    a. **Longitude:** 74.54.49
    b. **Latitude:** 40.46.27
11. **Present Permitted Flow or Permit Condition or Daily Maximum:** T1 Sanitary Wastewater
12. **Present Design Capacity of Facility:** >2,000 gpd*
13. **Summary of Population Served / to be Served Including Major Seasonal Fluctuations:**
    |--------------|----------------|---------------|
    | Mansfield    | 761 Students   | 800 Students  |
    |
    | TOTAL        | 761 Students   | 800 Students  |
14. **Summary of Wastewater Flow Received / to be Received Expressed in Million Gallons Per Day (mgd) and as a 30-Day Average Flow for DSW or a Daily Maximum Flow for DGW:**
    |--------------|----------------|---------------|
    | Mansfield    | 11,415 gpd     | 12,000 gpd    |
    a. **Residential Flow**
    b. **Commercial Flow**
    c. **Industrial Flow**
    d. **Infiltration / Inflow**
    **Total**

**Note:**
* A septic system with a 10,000 gallon septic tank followed by 8 seepage pits handles wastewater treatment and disposal.

**Present and future wastewater flows are based on a planning flow of 15 gpd/student.**
**WASTEWATER MANAGEMENT PLAN**

**DESCRIPTION OF WASTEWATER TREATMENT FACILITIES**

**FACILITY NUMBER 5**

NYK Logistics & Megacarrier

<table>
<thead>
<tr>
<th>1. Existing or Proposed Facility:</th>
<th>Existing</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. NJPDES Permit Number:</td>
<td>NJG0050601</td>
</tr>
<tr>
<td>3. Discharge to Ground Water (DGW) or Surface Water (DSW):</td>
<td>DGW</td>
</tr>
<tr>
<td>4. Name of Receiving Water or Aquifer:</td>
<td>Martinsburg Formation and Jutland Sequence</td>
</tr>
<tr>
<td>5. Classification of Receiving Water or Aquifer:</td>
<td>GW - IIA</td>
</tr>
<tr>
<td>6. Owner of Facility:</td>
<td>NYK Logistics &amp; Megacarrier</td>
</tr>
<tr>
<td>7. Operator of Facility:</td>
<td>NYK Logistics &amp; Megacarrier</td>
</tr>
<tr>
<td>8. Co-Permittee of Facility:</td>
<td>N/A</td>
</tr>
<tr>
<td>9. Location of Facility:</td>
<td></td>
</tr>
<tr>
<td>a. Municipality:</td>
<td>Mansfield Twp</td>
</tr>
<tr>
<td>b. Street Address:</td>
<td>555 Rt 57</td>
</tr>
<tr>
<td>c. Block(s):</td>
<td>15.01</td>
</tr>
<tr>
<td>Lot(s):</td>
<td>7</td>
</tr>
<tr>
<td>10. Location of Discharge (i.e. degrees, minutes, seconds):</td>
<td></td>
</tr>
<tr>
<td>a. Longitude</td>
<td>74.55.57</td>
</tr>
<tr>
<td>b. Latitude</td>
<td>40.46.6</td>
</tr>
<tr>
<td>or c. State Plane Coordinates:</td>
<td></td>
</tr>
<tr>
<td>11. Present Permitted Flow or Permit Condition or Daily Maximum:</td>
<td>T1 Sanitary Wastewater</td>
</tr>
<tr>
<td>12. Present Design Capacity of Facility:</td>
<td>&gt;2,000 gpd</td>
</tr>
<tr>
<td>13. Summary of Population Served / to be Served Including Major Seasonal Fluctuations:</td>
<td></td>
</tr>
<tr>
<td>Municipality</td>
<td>Mansfield</td>
</tr>
<tr>
<td>Present (2004)</td>
<td>224,900 Sq ft</td>
</tr>
<tr>
<td>110 Employees</td>
<td></td>
</tr>
<tr>
<td>Future (2024)</td>
<td>150 Employees</td>
</tr>
<tr>
<td>TOTAL</td>
<td>110 Employees</td>
</tr>
<tr>
<td>150 Employees</td>
<td></td>
</tr>
<tr>
<td>14. Summary of Wastewater Flow Received / to be Received Expressed in Million Gallons Per Day (mgd) and as a 30-Day Average Flow for DSW or a Daily Maximum Flow for DGW:</td>
<td></td>
</tr>
<tr>
<td>Municipality</td>
<td>Mansfield</td>
</tr>
<tr>
<td>a. Residential Flow</td>
<td>1,650 gpd</td>
</tr>
<tr>
<td>b. Commercial Flow</td>
<td></td>
</tr>
<tr>
<td>c. Industrial Flow</td>
<td></td>
</tr>
<tr>
<td>d. Infiltration / Inflow</td>
<td>1,650 gpd*</td>
</tr>
<tr>
<td>Total</td>
<td></td>
</tr>
</tbody>
</table>

**NOTE:** *Present and future wastewater flows are based on a planning flow of 15 gpd/employee.*
WASTEWATER MANAGEMENT PLAN
DESCRIPTION OF WASTEWATER TREATMENT FACILITIES

FACILITY NUMBER 6
Bartons West End Farms Inc

1. Existing or Proposed Facility: Existing
2. NJPDES Permit Number: NJG0075345
3. Discharge to Ground Water (DGW) or Surface Water (DSW): DGW
4. Name of Receiving Water or Aquifer: Jacksonburg Limestone, Kittatinny Supergroup, and Hardyston Quarzite
5. Classification of Receiving Water or Aquifer: GW - II A
6. Owner of Facility: Bartons West End Farms Inc
7. Operator of Facility: Bartons West End Farms Inc
8. Co-Permittee of Facility: N/A
9. Location of Facility:
   a. Municipality: Mansfield
   b. Street Address: 161 Jane's Chapel Road
   c. Block(s): 3.01
10. Location of Discharge (i.e. degrees, minutes, seconds):
    a. Longitude 74° 59.29', b. Latitude 40° 48.55'
    or c. State Plane Coordinates:

11. Present Permitted Flow or Permit Condition or Daily Maximum: T1 Sanitary Wastewater
12. Present Design Capacity of Facility: >2,000 gpd*
13. Summary of Population Served / to be Served Including Major Seasonal Fluctuations:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mansfield</td>
<td>26,000 sq. ft</td>
<td>26,000 sq. ft</td>
</tr>
<tr>
<td></td>
<td>22 employees</td>
<td>22 employees</td>
</tr>
</tbody>
</table>

TOTAL

14. Summary of Wastewater Flow Received / to be Received Expressed in Million Gallons Per Day (mgd)
and as a 30- Day Average Flow for DSW or a Daily Maximum Flow for DGW:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mansfield</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>a. Residential Flow</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>b. Commercial Flow</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>c. Industrial Flow</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>d. Infiltration / Inflow</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Total</td>
<td>*</td>
<td>*</td>
</tr>
</tbody>
</table>

NOTE: *Four (4) septic systems are maintained on-site. Systems 1 & 2 are traditional residential septic tanks (2) with disposal fields (2). Systems 3 & 4 are animal systems with mesh filters/screens and submersible pumps. The animal waste systems are pumped on average 7,500 gallons per month and the human waste systems are pumped once every two (2) years.*
WASTEWATER MANAGEMENT PLAN
DESCRIPTION OF WASTEWATER TREATMENT FACILITIES
FACILITY NUMBER 7
Hillside Village

1. Existing or Proposed Facility: Existing
2. NJPDES Permit Number: NJG0062901
3. Discharge to Ground Water (DGW) or Surface Water (DSW): DGW
4. Name of Receiving Water or Aquifer: Jacksonburg Limestone, Kittanning Supergroup, and Hurystone Quartzite
5. Classification of Receiving Water or Aquifer: GW - IIA
6. Owner of Facility: General Hancock Partnership
7. Operator of Facility: General Hancock Partnership
8. Co-Permittee of Facility: N/A
9. Location of Facility:
   a. Municipality: Mansfield
   b. Street Address: 550 Oxford Rd
   c. Block(s): ___________ Lot(s): ___________
10. Location of Discharge (i.e. degrees, minutes, seconds):
    a. 74.57.27 Longitude
    b. 40.49.25 Latitude
    or c. State Plane Coordinates: ___________
11. Present Permitted Flow or Permit Condition or Daily Maximum: T1 Sanitary Wastewater
12. Present Design Capacity of Facility: >2,000 gpd
13. Summary of Population Served / to be Served Including Major Seasonal Fluctuations:
    Mansfield 26 Mobile Units 26 Mobile Units
               1 Single Family 1 Single Family
    TOTAL 27 Units 27 Units
14. Summary of Wastewater Flow Received / to be Received Expressed in Million Gallons Per Day (mgd) and as a 30-Day Average Flow for DSW or a Daily Maximum Flow for DGW:
    Mansfield
       a. Residential Flow 5,600 gpd 5,600 gpd
       b. Commercial Flow ___________ ___________
       c. Industrial Flow ___________ ___________
       d. Infiltration / Inflow ___________ ___________
    Total 5,600 gpd 5,600 gpd
WASTEWATER MANAGEMENT PLAN
DESCRIPTION OF WASTEWATER TREATMENT FACILITIES
FACILITY NUMBER 8
Meadows WTF

1. Existing or Proposed Facility: Proposed
2. NIPDES Permit Number: NJ TBD
3. Discharge to Ground Water (DGW) or Surface Water (DSW): DGW
4. Name of Receiving Water or Aquifer: Maintinsburg Shale
5. Classification of Receiving Water or Aquifer: GW - 2
6. Owner of Facility: Private
7. Operator of Facility: Private
8. Co-Permittee of Facility: N/A
9. Location of Facility:
   a. Municipality: Mansfield
   b. County: Warren
   c. Street Address:
   d. Block(s): 15.01
   e. Lot(s): 9.01
10. Location of Discharge (in degrees, minutes, seconds):
    a. 74.55.53 Longitude
    b. 40.46.20 Latitude
11. Present Permitted Flow or Permit Condition or Daily Maximum: TBD
12. Present Design Capacity of Facility: 45.235 gpd
13. Summary of Population Served / to be Served Including Major Seasonal Fluctuations:
   Mansfield 0 452
   TOTAL 0 452
14. Summary of Wastewater Flow Received / to be Received Expressed in Million Gallons Per Day (mgd)
   and as a 30- Day Average Flow for DSW or a Daily Maximum Flow for DGW:
   Mansfield  a. Residential Flow 0 0.045235
   b. Commercial Flow
   c. Industrial Flow
   d. Infiltration / Inflow
   Total 0 0.045235
TOWNSHIP OF MANSFIELD

AN ORDINANCE TO AMEND CHAPTER 22 OF THE CODE OF THE TOWNSHIP OF
MANSFIELD TO CREATE ESTABLISH REQUIREMENTS FOR THE ESTABLISHMENT OF
RIPARIAN BUFFER CONSERVATION ZONES.

WHEREAS the Township Committee of the Township of Mansfield desires to implement
riparian buffer conservation zone in accordance with the guidelines from the New Jersey
Department of Environmental Protection.

BE IT ORDAINED by the Township Committee of The Township of Mansfield in the County of
Warren and State of New Jersey as follows:

Article 22-2 entitled Definitions is amended by the addition of the following:

Category One (Cl) Waters- Shall have the meaning ascribed to this term by the Surface Water
Quality Standards at N.J.A.C. 7:9B-1.15.

Category Two (C2) Waters-Shall mean those waters not designated as Outstanding Natural
Resource Waters or Category One in the Surface Water Quality Standards at N.J.A.C.
7:9B-1.15 for purposes of implementing the antidegradation policies set forth at
N.J.A.C.
7:9B-1.5(d).

Floodway-Shall have the meaning ascribed to this term by the Flood Hazard Area Control Act
(N.J.S.A. 58:16A-50 et seq.) and regulations promulgated there under published at
N.J.A.C. 7.13 et seq., and any supplementary or successor legislation and regulations
from time to time enacted or promulgated.

Intermittent Stream-Shall mean surface water drainage channels with definite bed and banks in
which there is not a permanent flow of water. Streams shown as a dashed line on the
USGS topographic quadrangle maps.

Lake, pond or reservoir-Shall mean any impoundment, whether naturally occurring or created in
whole or in part by the building of structures for the retention of surface water, excluding
sedimentation control and stormwater retention/detention basins and ponds designed for
treatment of wastewater.

Perennial stream-Means a stream that flows continuously throughout the year in most years.
Streams appearing as a blue line on USGS topographic quadrangle maps shall be
considered perennial, however any stream not shown which flows continuously shall be
included within this definition.
Riparian Buffer Conservation Zone (RBCZ) - Shall mean an area of land or water within or adjacent to a Surface Water Body within the municipality.

Riparian Buffer Conservation Zone Management Plan - Shall mean a plan approved by the Administrative Authority, prepared by a landscape architect, professional engineer or other qualified professional, which evaluates the effects of any proposed activity/uses on any RBCZ.

Surface Water Body - Shall mean any perennial stream, intermittent stream, lake, pond or reservoir, as defined herein. In addition, any state open waters identified in a letter of interpretation issued by the New Jersey Department of Environmental Protection Land Use Regulation Program shall also be considered surface water bodies.

There is added to Chapter 22 of the Mansfield Township Code a new Section 22-4.9 as follows:

22-4.8 Riparian Buffer Conservation Zone

a. Intent and purpose - The governing body of the Township of Mansfield finds that riparian lands adjacent to streams, lakes or other surface water bodies that are adequately vegetated, provide an important environmental protection and water resource management benefit. It is necessary to protect and maintain the beneficial character of riparian areas by implementing specifications for the establishment, protection and maintenance of vegetation along the surface water bodies within the jurisdiction of the Township of Mansfield, consistent with the interest of landowners in making reasonable economic use of parcels of land that include such designated areas. The purpose of this section is to designate Riparian Buffer Conservation Zones, and to provide for land use regulation therein in order to protect the streams, lakes and other surface water bodies of the Township of Mansfield; to protect the water quality of watercourses, reservoirs, lakes and other significant water resources within the Township of Mansfield; to protect the riparian and aquatic ecosystems of the Township of Mansfield; to provide for the environmentally sound use of the land resources of the Township of Mansfield, and to complement existing state, regional, county and municipal stream corridor protection and management regulations and initiatives. The results of these measures are to:

1. Restore and maintain the chemical, physical and biological integrity of the water resources the Township of Mansfield;

2. Prevent excessive nutrients, sediment and organic matter, as well as biocides and other pollutants from reaching surface waters by optimizing opportunities for filtration, deposition, absorption, adsorption, plant uptake, biodegradation and denitrification, which occur when stormwater
runoff is conveyed through vegetated buffers as stable, distributed sheet flow prior to reaching receiving waters;

3. Provide for shading of the aquatic environment so as to moderate temperatures, retain more dissolved oxygen, and support a healthy assemblage of aquatic flora and fauna;

4. Provide for the availability of natural organic matter (fallen leaves and twigs) and large woody debris (fallen trees and limbs) that provide food and habitat for small bottom dwelling organisms (insects, amphibians, crustaceans, and small fish), which are essential to maintain the food chain;

5. Increase stream bank stability and maintain natural fluvial geomorphology of the stream system, thereby reducing stream bank erosion and sedimentation and protecting habitat for aquatic organisms;

6. Maintain base flows in streams and moisture in wetlands;

7. Control downstream flooding; and

8. Conserve the natural features important to land and water resources, e.g., headwater areas, groundwater recharge zones, floodways, floodplains, springs, streams, wetlands, woodlands, and prime wildlife habitats.

b. Establishment of riparian buffer conservation zones-Riparian Buffer Conservation Zones (RBCZs) shall be delineated as follows:

1. In the case of Category One (Cl) waters, the RBCZ shall equal the Special Water Resource Protection Area, and shall be measured as defined at N.J.A.C. 7:8-5.5(h). Special Water Resource Protection Areas are established along all waters designated as Cl at N.J.A.C. 7:9B and perennial or intermittent streams that drain into or upstream of the Cl waters as shown on the USGS quadrangle map or in the County Soil Surveys within the associated HUC 14 drainage.

2. For areas adjacent to surface water bodies designated Category Two (C2) Waters for Trout Production (FW2-TP) the RBCZ shall be measured from the defined edge of the perennial stream, or centerline if the bank is not defined, and from the defined edge of a lake, pond or reservoir at bank-full flow or level, and shall extend 150 feet horizontally outward from the perpendicular.
3. For areas adjacent to other surface water bodies, the RBCZ shall be measured from the top of bank of the perennial stream, or centerline if bank is not defined, and from the defined edge of a lake, pond or reservoir at bank-full flow or level, and shall extend 75 feet horizontally outward from the perpendicular. Where steep slopes in excess of 25 percent are located within the designated widths, the RBCZ shall be extended to include the entire distance of this sloped area to a maximum of 100 feet.

4. For areas adjacent to surface water bodies for which the Floodway has been delineated, the RBCZ shall cover the entire Floodway area, or the area described in hereinabove, whichever area has the greatest extent. Floodway delineations shall be based upon the State’s adopted floodway delineations. However, requests for alterations to the adopted delineations can be provided to the New Jersey Department of Environmental Protection for consideration of site specific information is available.

c. Establishment of an RBCZ as an overlay zone.
An RBCZ is established as an overlay to the existing zoning districts. The provisions of the underlying district shall remain in full force except where the provisions of the RBCZ differ from the provisions of the underlying district, in which case the provision that is more restrictive shall apply. These provisions apply to land disturbances resulting from or related to any activity or use requiring application for any of the following permits or approvals:
- Zoning variance
- Conditional use
- Subdivision land development approval

2. The applicant shall be responsible for the initial determination of the presence of an RBCZ on a site, and for the preparation of a Riparian Buffer Conservation Zone Management Plan as set forth hereinbelow and identifying the area on any plan submitted to the Township of Mansfield, in conjunction with an application for a land development. This initial determination shall be subject to review and approval by the Administrative Authority and, where required, by the New Jersey Department of Environmental Protection.

d. Uses permitted in riparian buffer conservation zones:
For Category One (C1) RBCZs, permitted uses are governed by N.J.A.C. 7:8-5.5(h), unless otherwise exempt. If exempt from NJAC 7:8-5.5(h), the uses shall be governed by this ordinance as if the RBCZ.

2. Any other RBCZ area shall remain in a natural condition or, if in a
disturbed condition, including agricultural activities, at the time of adoption of this ordinance shall be restored to a natural condition unless said agricultural activity shall continue. There shall be no clearing or cutting of trees and brush, except for removal of dead vegetation and pruning for reasons of public safety or for the replacement of invasive species with indigenous species. There shall be no altering of watercourses, dumping of trash, soil, dirt, fill, vegetative or other debris, regrading or construction. The following uses are permitted either by right or after review and approval by the municipality in RBCZs. The following uses after review and approval by the Administrative Authority shall be permitted within an RBCZ:

(a) Open space uses that are primarily passive in character shall be permitted to extend into an RBCZ, provided near stream vegetation is preserved. These uses do not require approval by the Approving Authority or compliance with an approved RBCZ Management Plan. Such uses include wildlife sanctuaries, nature preserves, forest preserves and fishing areas but excluding structures. Such uses also include passive recreation areas of public and private parklands, including unpaved hiking, bicycle and bridle trails, provided that said trails have been stabilized with pervious materials.

(b) Fences, for which a permit has been issued to the extent required by applicable law, rule or regulation.

(c) Crossings by farm vehicles and livestock, recreational trails, roads, railroads, storm water lines, sanitary sewer lines, water lines and public utility transmission lines, provided that the land disturbance is the minimum required to accomplish the permitted use, subject to approval by the Administrative Authority, provided that any applicable State permits are acquired.

(d) Stream bank stabilization or riparian reforestation, which conform to the guidelines of an approved RBCZ Management Plan, or wetlands mitigation projects that have been approved by the Department of Environmental Protection, subject to approval by the Administrative Authority and subject to compliance with an approved RBCZ Management Plan.

(e. **Performance standards for riparian buffer conservation zones** All encroachments proposed into Category One (C1) RBCZs shall comply with the requirements at N.J.A.C. 7:8-5.5(h) and shall be subject to review
and approval by the New Jersey Department of Environmental Protection, unless exempt. If exempt, the encroachment shall be subject to the provisions below.

2. For all other RBCZs, the following conditions shall apply:

(a) All new major and minor subdivisions and site plans shall be designed to provide sufficient areas outside of the RBCZ to accommodate primary structures, any normal accessory uses appurtenant thereto, as well as all planned lawn areas.

(b) Portions of lots within the RBCZ must be permanently restricted by deed or conservation easement in which the Township of Mansfield has been named as a third party beneficiary provided that the easement may also be held by a public or private land conservation organization which has the ability to provide adequate protection to prevent adverse impacts within the RBCZ. The recorded conservation restriction shall be in the form approved by the municipality and shall run with the land and be binding upon the property owner and the successors or assigns in interest in the property or in any part thereof. The conservation restriction may include language reserving the right to make de minimus changes to accommodate necessary regulatory approvals upon the written consent of Mansfield Township provided such changes are otherwise consistent with this chapter. The recorded conservation restriction shall, at a minimum, include:

(1) A written narrative of the authorized regulated activity, date of issuance and date of expiration, and the conservation restriction that, in addition, includes all of the prohibitions set forth at N.J.S.A. 13:8B-2b(l) through (7);

(2) Survey metes and bounds description for the property as a whole and, where applicable, for any additional properties of the applicant subject to the conservation restrictions, and

(c) Any lands proposed for development which include all or a portion of an RBCZ shall as a condition of any major subdivision or major site plan approval, provide for the vegetation or revegetation of any portions of the RBCZ which are not vegetated at the time of the application or which were disturbed by prior land uses, including for agricultural use. Said vegetation plan shall utilize native and non-invasive tree and plant species to the maximum extent practicable.
(d) All stormwater shall be discharged outside of but may flow through an RBCZ and shall comply with the Standard For Off-Site Stability in the "Standards for Soil Erosion and Sediment Control in New Jersey", established under the Soil Erosion and Sediment Control Act, N.J.S.A. 4:24-39 et seq. (See N.J.A.C. 2:90-1.3).

(e) If stormwater discharged outside of and flowing through an RBCZ cannot comply with the Standard for Off-Site Stability, then the stabilization measures in accordance with the requirements of the above standards may be placed within the RBCZ, provided that:

1. Stabilization measures shall not be placed closer than 50 feet from the top of the bank at bank-full flow or level of effected surface water bodies.

2. The encroachment shall only be allowed where the applicant demonstrates that the functional value and overall conditions of the RBCZ will be maintained to the maximum extent practicable;

3. A conceptual project design meeting shall be held with the appropriate municipal staff and Soil Conservation District staff to identify necessary stabilization measures; and

4. All encroachments proposed under this section shall be subject to review and approval by the Administrative Authority.

f. Nonconforming structures and uses in riparian buffer conservation zones—

Nonconforming structures and uses of land within the RBCZ are subject to the following requirements:

Legally existing but nonconforming structures or uses may be continued.

2. Any proposed enlargement or expansion of the building footprint within a Category One (Cl) RBCZ shall comply with the standards in N.J.A.C. 7:8-5.5(h).

3. For all other RBCZs:

(a) Encroachment within the RBCZ shall only be allowed where previous development or disturbance has occurred.
(b) Existing impervious cover shall not be increased within the RBCZ as a result of encroachments where previous development or disturbances have occurred.

(c) Discontinued nonconforming uses may be resumed any time when showing clear indications of having not been abandoned. No change or resumption shall be permitted that is more detrimental to the RBCZ, as measured against the intent and purpose hereinabove, than the existing or former nonconforming use. This abandonment shall not apply to agricultural uses that are following prescribed Best Management Practices for crop rotation. However, resumption of agricultural uses must be strictly confined to the extent of disturbance existing at the time of adoption of this ordinance.

g. Uses prohibited in riparian buffer conservation zones

Any use within a Category One (C1) RBCZ shall comply with the standards in N.J.A.C. 7:8-5.5(h).

2. For other RBCZs, any use or activity not specifically authorized herein shall be prohibited within the RBCZ. The following activities and facilities and any similar such activities or facilities are prohibited:

(a) Removal or clear-cutting of trees and other vegetation or soil disturbance such as grading, except for selective vegetation removal for the purpose of stream or riparian area stabilization or restoration projects that require vegetation removal or grading prior to implementation.

(b) Storage of any hazardous or noxious materials.

(c) Use of fertilizers, pesticides, herbicides, and/or other chemicals in excess of prescribed industry standards or the recommendations of the Soil Conservation District.

(d) Roads or driveways, except where permitted in compliance with this section.

(e) Motor or wheeled vehicle traffic in any area, except as permitted by this Ordinance.

(f) Parking lots.
(g) Any type of permanent structure, except structures needed for a use permitted by this section.

(f) New subsurface sewage disposal areas, provided that, the expansion and replacement of existing subsurface sewage disposal areas for existing uses is permitted.

(g) Residential grounds or lawns, except as otherwise permitted pursuant to this section.

h. Activities permitted in stream buffer conservation zones in the case of no reasonable or prudent alternative or extreme hardship; interpretations

For Category One (Cl) RBCZs, requests for exemptions that fall under the purview of the Stormwater Management Rules must be authorized by the New Jersey Department of Environmental Protection, as per N.J.A.C. 7:8-5.5(h)1.i.

2. For other RBCZs, variances subject to the provisions of N.J.S.A. 40:SSD-70c may be granted by the Administrative Authority in cases of a preexisting lot (existing at the time of adoption of this ordinance) when there is insufficient room outside the RBCZ for uses permitted by the underlying zoning and there is no other reasonable or prudent alternative to placement in the RBCZ, including obtaining variances from setback or other requirements that would allow conformance with the RBCZ requirements. In any event said encroachment is not permitted closer than 100 feet from the top of the bank at bank-full flow or level of Category Two Waters for Trout Production (FW2-TP), or closer than 50 feet from the top of the bank at bank-full flow or level of other surface water bodies.

3. When a landowner or applicant disputes the boundaries of a Category 2 (C2) RBCZ, or the defined bank-full flow or level, the landowner or applicant shall submit evidence to The Administrative Authority that describes the RBCZ, presents the landowner or applicant’s proposed RBCZ delineation, and presents all justification for the proposed boundary change.

Riparian buffer conservation zone management plan

In conjunction with a subdivision or site plan within any RBCZ, no construction, development, use, activity or encroachment shall be permitted unless the effects of such development are accompanied by
preparation, approval, and implementation of a Riparian Buffer Conservation Zone Management Plan.

2. The landowner, applicant, or developer shall submit to approving authority, or its appointed representative, a Riparian Buffer Conservation Zone Management Plan prepared by an environmental professional, professional engineer or other qualified professional which fully evaluates the effects of any proposed uses on the RBCZ. The Riparian Buffer Conservation Zone Management Plan shall identify the existing conditions including:

(a) Existing vegetation;
(b) Field delineated surface water bodies;
(c) Field delineated wetlands;
(d) The 100-year floodplain;
(e) Flood Hazard Areas, including Floodway and Flood Fringe areas, as delineated by the New Jersey Department of Environmental Protection;
(f) Soil classifications as found on Soil Surveys;
(g) Existing subdrainage areas of site with HUC-14 (Hydrologic Unit Code) designations;
(h) Slopes in each subdrainage area segmented into sections of slopes less than or equal to fifteen (15) percent; above fifteen percent but less than twenty (20) percent; and greater than twenty (20) percent.

3. The proposed plan shall describe all proposed uses/activities, and fully evaluate the effects of all proposed uses/activities in an RBCZ, and all proposed management techniques, including proposed vegetation and any other measures necessary to offset disturbances to the RBCZ. A discussion of activities proposed, as well as management techniques proposed to offset disturbances and/or enhance the site to improve the RBCZ’s ability to function effectively as an RBCZ, shall also be included with the RBCZ management Plan submittal to the Township of Mansfield.

4. The Riparian Buffer Conservation Zone Management Plan must include management provisions in narrative and/or graphic form specifying:

(a) The manner in which the area within the RBCZ will be owned and by whom it will be managed and maintained.
(b) The conservation and/or land management techniques and practices that will be used to conserve and protect the RBCZ, as applicable.
(c) The professional and personnel resources that are expected to be necessary, in order to maintain and manage the RBCZ.
(d) A revegetation plan, if applicable, that includes: three (3) layers of vegetation, including herbaceous plants that serve as ground cover,
understory shrubs, and trees that when fully mature, will form an overhead canopy. Vegetation selected must be native, non-invasive species, and consistent with the soil, slope and moisture conditions of the site. The revegetation plan shall be prepared by a qualified environmental professional, landscape architect, or professional engineer, and shall be subject to the approval of the Administrative Authority. Dominant vegetation in the Riparian Buffer Conservation Zone Management Plan shall consist of plant species that are suited to the stream buffer environment. (e) A Riparian Buffer Conservation Zone Management Plan is not required where the RBCZ is not being disturbed and conservation easements/deed restrictions are applied to ensure there will be no future clearing or disturbance of the RBCZ.

(f) Performance of the Riparian Buffer Conservation Zone Management Plan shall be guaranteed by a surety, such as a bond, cash or letter of credit, issues in accordance with bonding provisions of Article 19-8 or the code which shall be provided to the Township of Mansfield prior to the Township of Mansfield issuing any permits or approving any uses relating to the applicable use or activity.

Inspections.-Lands within or adjacent to an identified RBCZ may be inspected by designee of the Township when:
1. A subdivision or land development plan is submitted;
2. A change or resumption of a nonconforming use is proposed;
3. A discontinued nonconforming use is resumed.
4. The RBCZ may also be inspected periodically by representatives from the Township of Mansfield if excessive or potentially problematic erosion is present, other problems are discovered, or at any time when the presence of an unauthorized activity or structure is brought to the attention of municipal officials or when the downstream surface waters are indicating reduction in quality.

The above Ordinance was introduced on First Reading by the Mayor and Township Committee of the Township of Mansfield, Warren County, NJ at a regular meeting held January 11, 2006 and will be considered for Final Reading and adoption at a public hearing to be held March 8, 2006 at 8:00 p.m. at the Municipal Building, 100 Port Murray Road, Port Murray, NJ at which time the public may comment.

Dated: 3-10-06

Laurie Courter
Township Clerk
ORDINANCE 2005-17

AN ORDINANCE TO AMEND CHAPTER X OF THE CODE OF THE TOWNSHIP OF MANSFIELD TO CREATE AND ESTABLISH REQUIREMENTS FOR THE INSPECTION OF ONSITE WASTEWATER TREATMENT SYSTEMS.

WHEREAS the Township Committee of the Township of Mansfield desires to implement an onsite wastewater treatment system inspection program in accordance with the guidelines from the United States Environmental Protection Agency and in cooperation with the New Jersey Department of Environmental Protection.

BE IT ORDAINED by the Township Committee of the Township of Mansfield in the County of Warren and State of New Jersey as follows:

There is added to Chapter X of the Mansfield Township Code a new Section 10-7 as follows:

10-7 On-Site Wastewater Treatment Systems Inspections

10-7.1. Findings. The Township Committee has determined that it is in best of the Township, its residences and businesses to inspect all on-site wastewater treatment (commonly known as septic) systems. This finding is based on the following:

a. Residential and non-residential onsite wastewater treatment systems are in use within the Township of Mansfield.

b. Onsite wastewater treatment systems, similar to any other physical structure, require ongoing maintenance and proper operation to ensure proper functionality.

c. When existing onsite wastewater treatment systems have malfunctioned, even when the systems have been designed, constructed, and sited in accordance with applicable standards, the malfunction is largely due to lack of proper operation and maintenance. These malfunctions have been shown to adversely affect public health and welfare and the environment. Such systems constitute a potential source of pollution of ground and surface waters, contamination of potable water supplies, foul odors, nuisance problems and other hazards to public health.

d. It is determined to be in the interest of public health and the environment, safety and welfare to establish provisions to regulate the management of such systems to protect the public and environment against system failures and resultant pollution.

e. The inspection provisions contained in this Ordinance are necessary to protect the public health safety and welfare and it is therefore necessary to exceed the provisions contained in N.J.A.C. 7:9A-1 et seq.
f. In order to enable the use of onsite system technology that enhances treatment of wastewater, management and maintenance are a necessity.

g. Economic benefits to all onsite system owners by improving the quality of wastewater management, will extend the serviceable life of onsite systems, preventing or postponing the need for costly repairs or replacements.

10-7.2 PURPOSE It is the purpose of this ordinance:

a. To establish an inspection program for residential and non-residential onsite wastewater treatment systems in the Township of Mansfield in order to ensure the proper operation and maintenance of such systems.

b. To regulate onsite wastewater treatment systems in Mansfield Township to protect public health and welfare and the environment. This includes a means of educating onsite wastewater treatment system owners/operators, as defined herein, in the characteristics of such systems and the proper procedures for altering, operating and maintaining them.

c. To develop a management program to maintain records regarding onsite wastewater treatment systems in the program area.

d. To promote and assure the proper use and maintenance of residential and nonresidential onsite wastewater treatment systems.

10-7.3 DEFINITIONS. All definitions given in Subchapter 2 (N.J.A.C. 7:9A 2.1) of the New Jersey Department of Environmental Protection (NJDEP) Standards for the Construction of Individual Onsite wastewater treatment Systems, N.J.A.C, 7:9A-1.1 et seq., and any amendments thereto ("NJDEP Regulations") are hereby incorporated into this article, with the following additions:

a. ADVANCED WASTEWATER TREATMENT OR DISPOSAL TECHNOLOGY- Any component or system, which is a part of an individual subsurface sewage disposal system, that is employed to reduce levels of pollution or convey pollutants to the subsurface environment that is not addressed or is not designed in strict conformance with the requirements of N.J.A.C. 7:9A.

b. BOARD OF HEALTH- The Board of Health of the Township of Mansfield.

c. EDUCATION PROGRAM- An educational program prepared and administered by the Board of Health regarding the function of onsite wastewater treatment systems and the proper procedures for the operation and maintenance of such systems. The educational program shall be performed in accordance with the minimum requirements of N.J.A.C. 7:9A-3.14.)

d. ENFORCING OFFICIAL- The Construction Code Official of the Township of Mansfield or his designee.
e. LICENSED SEPTIC SLUDGE REMOVAL OPERATOR- Any person, firm or corporation which has been duly examined by the enforcing official and found qualified to pump onsite wastewater treatment systems, and who has been properly registered with all appropriate local, county and state authorities.

f. NON-RESIDENTIAL- Any realty improvement other than a single family home. Such systems include but are not limited to those systems defined in N.J.A.C. 7:9A-1.8(C)2. Typical examples include but are not limited to: commercial buildings, restaurants, food establishments, commercial/residential mixed uses, and systems servicing multiple units.

g. ONSITE WASTEWATER TREATMENT SYSTEM- An individual subsurface sewage disposal system as referred to in N.J.A.C. 7:9A. A septic system is one example.

h. OWNER/OPERATOR- The person who owns or leases the realty improvement which is served by a residential or non-residential onsite wastewater treatment system and/or the person who uses or operates said system.

i. PLOT PLAN - A sketch showing the type (if known) and location of the onsite wastewater treatment system servicing the property, as well as the location and type of any onsite water supply. All plots plans shall be drawn to scale and list the dimensions used.

j. SYSTEM- An individual or non-individual onsite wastewater treatment system, including all of the component parts thereof.

10-7.4 SCOPE, APPLICABILITY AND EXEMPTIONS

A. SCOPE. The owner of any realty improvement serviced by an onsite wastewater treatment system located in the Township of Mansfield shall be subject to all of the requirements of this chapter.

B. APPLICABILITY. No person within the Township of Mansfield area shall operate a residential or non-residential onsite wastewater treatment system unless such construction, installation, alteration, maintenance or operation is in accordance with all applicable sanitary regulations and this article.

C. EXEMPTIONS. Any system not in operation for a period of six (6) months or longer shall be exempted from this article. The Construction Code Official shall require an owner or operator of a system seeking exemption under this section to submit proof in the designated form to qualify for this exemption. This exemption shall cease if and when the system is returned to operation.
10-7.5 License to Operate

A. REQUIREMENT FOR LICENSE. On and after March 1, 2006 no owner or occupant of a property in the Township of Mansfield upon which an individual or non-individual onsite wastewater treatment system is located which has transferred a property or required a certificate of occupancy shall operate or otherwise use a system unless a currently valid license to operate the system has been issued by the Construction Code Official, in accordance with the schedule herein, to the owner of the property on which the system is located.

B. ISSUANCE OF LICENSE. The Construction Code Official may issue a license to operate and distribute educational information relative to the proper operation and maintenance practices to the owner and occupant of a property upon one or more of the following events:

1. Issuance of a certificate of compliance by the Board of Health or its designee for any system using advanced wastewater treatment or disposal technology(ies);

2. Issuance of a certificate of compliance by the Board of Health for a new system;

3. Issuance of a certificate of compliance by the Board of Health for the alteration of a system;

4. Upon the sale or transfer of a premises;

C. All licenses issued pursuant to this section shall be on a form provided by the Construction Code Official. Once issued, a license shall not be transferable upon change of ownership or occupancy. A new license is required for the premises. A fee, as provided in hereunder, shall accompany each application for a license or renewal. The initial application for a license shall include a plot plan showing the location of the septic system (both the tank and the disposal area) and any private water source on the property. The plot plan shall also include the general location, if known, of any wells, and septic systems on adjoining properties.

D. EXPIRATION/RENEWAL. The license to operate shall expire upon change of ownership or issuance of a new certificate of occupancy.

1. Requirements for Renewal: The Construction Code Official shall not renew the license unless the licensee has submitted the following to the Board of Health or its designee:

(a.) Submission of a Septic System Inspection Report prepared in accordance with the Technical Guidance for Inspections of Onsite Wastewater Treatment and Disposal Systems published by the New Jersey Department of Environmental Protection dated July 2003 or latest edition on a form approved by the Board of Health or its designees indicating that the system has been maintained, is not in need of pumping, and is functioning in conformance with the requirements of this chapter. Said form shall be prepared, completed and certified by one of the following:
[1] A licensed septic installer;
[2] A NJDEP registered inspector;
[3] A licensed professional engineer;
[4] A licensed health officer or sanitary;

(b) If the inspection indicates that pumping of the treatment tank or other maintenance, alteration, or repair of the system is necessary, the Board of Health shall issue a notice of pumping, alteration or repair. Following pumping or other maintenance, alteration or repair of the system, the owner/operator shall submit to the Board of Health a completed alteration/pumping report prepared and signed by the person performing the required work.

E. TESTING OF THE SYSTEM. No person shall test an onsite wastewater treatment system in a manner that will adversely affect the functioning of the system. Hydraulic loading shall not be applied in excess of the design flow capacity. All solids shall have been removed from the septic tank and/or grease trap prior to testing unless the hydraulic loading is applied at a point that will bypass the septic tank and/or grease trap.

F. SUSPENSION OF LICENSE: The Construction Code Official may suspend or revoke the license to operate in the following circumstances:

1. It has been determined by the Board of Health or its designee that the system is malfunctioning based upon criteria provided for in N.J.A.C. 7:9A-3.4(a) and the licensee fails to take immediate steps to correct said malfunction as directed by the Board of Health or its designee;

2. The owner or occupant of the premises served by the system violates any provision of this chapter with respect to operation and maintenance of the system; or

3. Operation of an onsite system under a suspended license shall be subject to penalties as set forth herein.

10-7.5 Conditions of the License. The following conditions shall apply to all licenses:

A. GENERAL. The onsite wastewater treatment system shall be used only for the disposal of sanitary wastes of the type and origin provided for in the approved engineering design. The following conditions of the license shall be adhered to:

1. No permanent or temporary connection shall be made to any source of wastes, waste water or clean water other than those plumbing fixtures which are normally present within the type of facility indicated in the approved engineering design.

2. Drainage from basement floors, footings or roofs shall not enter the sewage disposal system and shall be diverted away from the area of the disposal field.

3. As set forth in N.J.S.A. 58:10A-17, no person shall use or introduce or cause any other person to use or introduce into any sewage water disposal system any sewage system cleaner containing any restricted chemical material.
4. Disposal of materials containing toxic substances into an onsite wastewater treatment system is prohibited. Materials containing toxic substances include, but are not limited to, waste oil (other than cooking oil), oil based or acrylic paints, varnishes, photographic solutions, pesticides, insecticides, paint thinners, organic solvents or degreasers and drain openers.

5. Inert or non-biodegradable substances should not be disposed of in the onsite wastewater treatment system. Such substances include, but are not limited to, disposable diapers containing plastic, cat box litter, coffee grounds, cigarette filters, sanitary napkins, facial tissues and wet-strength paper towels.

6. Large quantities of cooking greases or fats shall not be discharged into systems not equipped with a grease trap designed and constructed as prescribed in N.J.A.C.7:9A8.1.

7. Major plumbing leaks shall be repaired promptly to prevent hydraulic overloading of the system. Vehicle traffic and vehicular parking shall be kept away from the aspects of the system, unless the system has been specifically designed to support vehicular traffic.

8. Swimming pools and additional building structures shall be setback according to the requirements of N.J.A.C. 7:9A-4.3.

9. Water softener backwash and HVAC condensate may be disposed into the onsite system in accordance with N.J.A.C. 7:9A-12.1. Although water softener backwash may be disposed into the onsite system in accordance with N.J.A.C. 7:9A-12.1, to reduce hydraulic loading to the system and preserve the serviceability of the system, HVAC condensate and water softener backwash is required to be discharged to a separate seepage pit designed in accordance with N.J.A.C. 7:9A-11.

B. DISPOSAL FIELD MAINTENANCE.

1. The area of the disposal field shall be kept free of encroachments from decks, pools, sprinkler systems, driveways, patios, accessory buildings, additions to the main building and trees or shrubbery whose roots may disrupt the system.

2. Grading shall be maintained in a condition that will promote run-off of rainwater away from the system and prevent ponding.

3. All drainage from roofs, footing drains, ditches or swales shall be diverted away from the system.

4. Vegetation shall be maintained to prevent soil erosion.
C. ADDITIONAL INSPECTION AND MAINTENANCE REQUIREMENTS FOR SYSTEMS WITH GREASE TRAPS.

1. Grease traps or other grease removal systems shall be inspected and cleaned out at a frequency adequate to prevent the volume of grease from exceeding the grease retention capacity. Grease shall be removed whenever seventy-five percent (75%) of the grease retention capacity has been reached.

2. Pumping of grease traps/removal systems shall be performed by a solid waste hauler registered with the NJDEP in accordance with the requirements of N.J.A.C. 7:26g.

D. MAINTENANCE OF DOSING TANKS. Dosing tanks and associated pumps, siphons, switches, alarms, electrical connections and wiring shall be maintained in proper working order. Any solids that accumulate in the dosing tank shall be removed and disposed of in a sanitary manner.

10-7.6 ENFORCEMENT. Any licensed on-site sewage disposal system or component thereof that is found to be malfunctioning (as defined in N.J.A.C. 7:9A-2.1 and 3.4) shall constitute a nuisance and shall be repaired, modified or replaced pursuant to an order of the Board of Health or its designee to correct the condition caused by the malfunction. Alterations shall be performed in accordance with N.J.A.C. as adopted and implemented by the Board of Health by virtue of this Code and any amendments thereto.

10-7.7 MALFUNCTIONING ONSITE WASTEWATER TREATMENT SYSTEM: INSPECTIONS OF SYSTEM; REVOCATION OF LICENSE

A. The Board of Health shall have the right to inspect any system that shows evidence of any malfunction. Such evidence may include, but not be limited to, foul odors, leakage to ground surface, or saturated soil/lush vegetation over system. Water and/or soil samples may be taken to confirm the existence of a malfunctioning system.

B. The Board of Health may require that any malfunctioning system be corrected by servicing, replacement or alteration of the system.

C. Until any necessary replacement or alteration of a system has been accomplished, the Board of Health may require pumping and the removal of the entire contents of the septic tank for the system (both liquids and solids) at intervals specified by the Board.

D. No provision of this Ordinance shall be interpreted as precluding the Construction Code Official from revoking a license issued for the operation of a system in the event that the Board of Health or its designee shall determine that such action is necessary and appropriate for the enforcement of this Ordinance and any other relevant Board of Health Ordinance. Any such revocation shall be upon Notice to the owner/operator, with an opportunity to comment or appeal.
10-7.8 Fees

A. A license fee of $100 shall accompany each application for system licensure.

B. If a Board of Health Inspection is required to complete the license, an additional fee of $350 shall be due at time of license renewal

10-7.9 Violations and Penalties Any person who shall violate any of the provisions of this section shall, upon conviction, be liable to the penalty stated in Chapter I, Section 105. Each day the same is violated shall be deemed and taken to be a separate and distinct violation.

The above Ordinance was introduced on First Reading by the Mayor and Township Committee of the Township of Mansfield, Warren County, NJ at a regular meeting held December 14, 2005 and will be considered for Final Reading and adoption at a public hearing to be held December 28, 2005 at 8:00 p.m. at the Municipal Building, 100 Port Murray Road, Port Murray, NJ at which time the public may comment.

[Signature]

LAURIE COURTER, RMC