ATTACHMENT #1
Special Utility Committee Meeting of 12-11-07

BE IT ORDAINED BY THE MAYOR AND COUNCIL OF THE CITY OF DOVER, IN COUNCIL MET:

That Appendix B - Zoning Ordinance, Article 3 – District Regulations, Section 29 Source Water Protection Overlay Zone (SWPOZ) be amended by inserting a new subsection 29.7 as follows:

29.7 Tier 3: Excellent Recharge Areas. Lands defined as Tier 3 lands, are areas which have been identified as 'Excellent Recharge Areas'. Recharge Areas are defined as land with high percentages of sand and gravel that have "excellent" potential for recharge as determined through a Stack Unit Mapping Analysis performed originally by the Delaware Geological Survey.

29.71 Applicability. The impervious cover restrictions of this section shall apply only to any activity requiring approval of the planning commission.

29.72 Impervious Surfaces. Impervious Surfaces within Tier 3 lands of the Source Water Protection Overlay Zone are limited to a maximum of 30%. Limits upon impervious surface apply to portions of a site which is within Tier 3 lands. New development may exceed the 30% impervious cover threshold up to 60% impervious cover provided the differential volume of stormwater generated from 30% to 60% impervious cover, based on the two-year storm, is infiltrated within an excellent recharge area. The use of infiltration shall be based upon the technical merits of the application as well as the ability to quantify the volume of recharge. All infiltration facilities shall be designed in accordance with the Delaware Sediment and Stormwater Regulations.

29.73 Redevelopment. Site Modification which requires Site Development Plan Approval must create a 15% reduction in the amount of impervious surface on the site when compared to pre-redevelopment conditions.

(a) If the 15% reduction would require a site to go below the 30% maximum impervious surface provision of Section 29.72, then the maximum impervious surface cover for the site is 30%.

(b) If stormwater is infiltrated within the excellent recharge area as per Section 29.72 then only an amount of reduction in impervious surface which is necessary to meet the 60% maximum will be required.

29.74 Storage Tanks. Underground Storage Tanks are prohibited within Tier 3 lands. Aboveground Storage Tanks which use, store, transfer, or dispose of any solid or liquid material or waste having potentially harmful impact on groundwater quality are prohibited within Tier 3 Lands.

29.75 Site Design. All reasonable efforts must be undertaken to position permanent structures on the portions of the property which are not subject to the Tier 3: Excellent

Recharge Area. The particular desires of personal or corporate entities shall not constitute reasonable efforts.

29.76 Alternative Design Standards. It is the intent of this Ordinance to protect, conserve, and improve the available supply of potable water while still maintaining property rights. As such, where the restrictions of this Ordinance prevent development that would otherwise be reasonable and proper according to the base zoning, the applicant may request alternative design standards as part of their application and development plan. The Planning Commission may modify specific bulk standards when in the opinion of the Commission, it has been demonstrated that the use of alternative design standards is desirable and consistent with the protection of water resources. Alternative bulk standards include, but are not limited to changes in building height/stories, floor area ratio, or building setbacks.

29.77 Master Plans. Site development which occurs as part of a Site Development Master Plan as specified in the *Zoning Ordinance,* Article 10 §2.58 may consider the area of the entire Tier 3 portion of the master plan area when developing individual phases. This will allow for higher than prescribed amounts of impervious cover on specific portions of the Master Plan so long as the overall impervious surface for the entire Tier 3 Lands in the Plan remains in compliance with this section. On a site development Master Plan, when the City Engineer certifies that the project utilizes superior infiltration design that maximizes groundwater recharge, impervious cover may be increased to 75%.

29.78 Improvements to Existing Residential Lots. Improvements to existing residential lots, including additions to existing one-family dwellings, the placement of sheds, and fences are exempt from Section 29.7 and may be permitted when all other applicable zoning district bulk requirements are met.

29.79 Downtown Target Area. The Downtown Redevelopment Target Area as defined in Appendix C, Article II, Section 3 [Target Area] of the City of Dover Code of Ordinance shall be exempt from the requirements and restrictions of the Source Water Protection Overlay Zone.

29.710 Special Environmental Considerations. On sites where infiltration would be contrary to a clean-up agreement or other conditions imposed by the Department of Natural Resources and Environmental Control or the U.S. Environmental Protection Agency, the impervious surface limitations of this section shall not apply to the affected areas. Such sites shall be certified by the City Engineer through the development application process.

29.711 Procedure for Contesting the delineation of the Source Water Protection Overlay Zone. Data used to define these zones was generated in a report from the Delaware Geological Survey entitled, “Report of Investigations NO. 66, Ground-Water Recharge Potential Mapping in Kent and Sussex Counties, Delaware”. Any challenges to the delineation of the Source Water Protection Overlay Zone must follow the methods provided in the above sited report to contest the delineation.

Synopsis: This ordinance adds the protection of excellent recharge areas to the Source Water Protection Overlay Zone. It restricts impervious cover within the areas identified as excellent recharge areas to 30%, but allows an increase in impervious cover to 60% when stormwater is infiltrated on-site. For redevelopment, it requires a 15% reduction in impervious cover. For a site development master plan where superior infiltration design is utilized, impervious cover may be increased to 75%. The ordinance also exempts the downtown redevelopment target area from the impervious cover requirements of this section.

The following text is provided to place the proposed zoning text amendment in the context of the entire Source Water Protection Overlay Zone. The proposed new text is provided in bold.

Section 29 Source Water Protection Overlay Zone (SWPOZ)

29.1 Purpose. The purpose of this Source Water Protection Overlay Zone is to provide a safe drinking water supply and to ensure that groundwater is adequately protected and maintained. The Overlay Zone's purpose is to protect public health and safety by minimizing contamination of the aquifer and to ensure that the aquifer is property maintained and supplied with clean water through the reduction of impervious surfaces.

29.2 Definitions.

Aboveground Storage Tank (AST). An AST is a single containment vessel greater than 250 gallons as defined in the Delaware *Regulations Governing Aboveground Storage Tanks*. ASTs with a storage capacity greater than 12,499 gallons containing petroleum or hazardous substances, and ASTs with a storage capacity greater than 39,999 gallons containing diesel, heating fuel or kerosene are subject to the design, construction, operation and maintenance requirements of the Delaware AST regulations.

Hazardous Material. A material which is defined in one or more of the following categories:

> *Ignitable:* A gas, liquid or solid which may cause fires through friction, absorption of moisture, or which has low flash points. Examples: white phosphorous and gasoline. Carcinogenic: A gas, liquid, or solid which is normally considered to be cancer causing or mutagenic. Examples: PCB's in some waste oils.
> *Explosive:* A reactive gas, liquid or solid which will vigorously and energetically react uncontrollably if exposed to heat, shock, pressure or combinations thereof. Examples: dynamite, organic peroxides and ammonium nitrate.
> *Highly Toxic:* A gas, liquid, or solid so dangerous to man as to afford an unusual hazard to life. Example: chlorine gas. Moderately Toxic: A gas, liquid or solid which through repeated exposure or in a single large dose can be hazardous to man. Corrosive: Any material, whether acid or alkaline, which will cause severe damage to human tissue, or in case of leakage might damage or destroy other containers of hazardous materials and cause the release of their contents. Examples: battery acid and phosphoric acid.

Underground Storage Tank (UST). An UST is one or a combination of Tanks including underground Pipes, the volume of which is 10% or more belowground, as defined in the Delaware *Regulations Governing Underground Storage Tank Systems*. The following USTs are not subject to the design, construction, operation and maintenance requirements of the Delaware UST Regulations: Residential Heating Fuel, Agricultural and Residential Motor Fuel USTs less than 1,100 gallons and any UST less than 110 gallons.

29.3 Use and Bulk Requirements. The uses and bulk standards which govern the underlying zoning designations attached to the properties within the Source Water Protection Overlay Zone shall apply in all instances except where uses are specifically prohibited by this section and except pertaining to Impervious Surface, Ground Cover, and Floor Area Ratio. Where issues of Impervious Surface, Ground Cover, and Floor Area Ratio are concerned, the provisions of the Source Water Protection Overlay Zone are the governing provisions, overriding the existing zoning for the property.

29.4 Zone Boundaries. This section of the *Zoning Ordinance* encompasses the lands demarcated on the City of Dover Zoning Map as set forth in Article 2 §2 of this Ordinance, as the Source Water Protection Overlay Zone.

29.5 Uses Prohibited. The following uses are specifically prohibited throughout the Source Water Protection Overlay Zone:

29.51 Uses Prohibited

a) Automobile body/repair shop, motor vehicle, boat or farm equipment service
b) Gas stations and motor vehicle service stations
c) Fleet/trucking/bus terminal
d) Dry cleaner
e) Electrical/electronic manufacturing facility
f) Machine shop
g) Metal plating/finishing/fabricating facility
h) Chemical processing/storage facility
i) Wood preserving/treating facility
j) Junk yard/scrap yard/salvage yard
k) Mines/gravel pit
l) Land divisions resulting in high density (>1 unit/acre) septic systems
m) Equipment maintenance/fueling areas
n) Injection wells/dry wells/sumps, except for single-family residences directing gutter downspouts to a drywell
o) Underground storage tanks
p) All uses not permitted in the underlying zone district

29.6 Geothermal Wells. Geothermal wells are permitted uses within the Source Water Protection Overlay Zone in accordance with other City and State regulations.

29.7 Tier 3: Excellent Recharge Areas. Lands defined as Tier 3 lands, are areas which have been identified as 'Excellent Recharge Areas'. Recharge Areas are defined as land with high percentages of sand and gravel that have "excellent" potential for recharge as determined through a Stack Unit Mapping Analysis performed originally by the Delaware Geological Survey.

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29.73 Redevelopment. Site Modification which requires Site Development Plan Approval must create a 15% reduction in the amount of impervious surface on the site when compared to pre-redevelopment conditions.

(a) If the 15% reduction would require a site to go below the 30% maximum impervious surface provision of Section 29.72, then the maximum impervious surface cover for the site is 30%.

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29.75 Site Design. All reasonable efforts must be undertaken to position permanent structures on the portions of the property which are not subject to the Tier 3: Excellent Recharge Area. The particular desires of personal or corporate entities shall not constitute reasonable efforts.

29.76 Alternative Design Standards. It is the intent of this Ordinance to protect, conserve, and improve the available supply of potable water while still maintaining property rights. As such, where the restrictions of this Ordinance prevent development that would otherwise be reasonable and proper according to the base zoning, the applicant may request alternative design standards as part of their application and development plan. The Planning Commission may modify specific bulk standards when in the opinion of the Commission, it has been demonstrated that the use of alternative design standards is desirable and consistent with the protection of water resources. Alternative bulk standards include, but are not limited to changes in building height/stories, floor area ratio, or building setbacks.

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29.78 Improvements to Existing Residential Lots. Improvements to existing residential lots, including additions to existing one-family dwellings, the placement of sheds, and fences are exempt from Section 29.7 and may be permitted when all other applicable zoning district bulk requirements are met.

29.79 Downtown Target Area. The Downtown Redevelopment Target Area as defined in Appendix C, Article II, Section 3 [Target Area] of the City of Dover Code of Ordinance shall be exempt from the requirements and restrictions of the Source Water Protection Overlay Zone.

29.710 Special Environmental Considerations. On sites where infiltration would be contrary to a clean-up agreement or other conditions imposed by the Department of Natural Resources and Environmental Control or the U.S. Environmental Protection Agency, the impervious surface limitations of this section shall not apply to the affected areas. Such sites shall be certified by the City Engineer through the development application process.

29.711 Procedure for Contesting the delineation of the Source Water Protection Overlay Zone. Data used to define these zones was generated in a report from the Delaware Geological Survey entitled, "Report of Investigations NO. 66, Ground-Water Recharge Potential Mapping in Kent and Sussex Counties, Delaware". Any challenges to the delineation of the Source Water Protection Overlay Zone must follow the methods provided in the above sited report to contest the delineation.

29.8 Tier 2: Primary Wellhead Protection Areas. Lands defined as Tier 2 lands, are areas which have been identified as Primary Wellhead Protection Areas.

29.81 Purpose and Intent. The purpose of the Primary Wellhead Protection Areas is to safeguard the potable water resources of Dover and Kent County and to safeguard the public health, safety, and resources through regulation of land use and development within zones of protection surrounding potable water supply well fields.

29.82 Areas within three hundred (300) feet of the well shall be one hundred (100) percent open space.

29.83 New development within five hundred (500) feet of the well must demonstrate that the new development will not produce, store, transfer or otherwise handle hazardous materials.

29.84 The Primary Wellhead Protection area around the well may be reduced to a one hundred and fifty (150) foot radius provided a hydrogeological report, prepared by a Delaware Registered Geologist and submitted to the satisfaction of the Delaware Geological Survey and the DNREC, is prepared. The report must certify that (1) the minimum 60-day time of-travel from a point to the public water supply well is maintained and (2) the well draws from a confined aquifer. Upon completion of such a report, the regulations governing Tier 1 lands within the Source Water Protection Overlay Zone will apply.

29.85 Runoff. The natural runoff flowing into wellhead areas shall be allowed and all new stormwater run-off shall be diverted around the wellhead protection areas wherever practical.

29.86 The stormwater system's discharge to Tier 2: Primary Wellhead Protection Areas land shall be by sheet flow through a grassland or discharge from a stormwater management facility having a wetland or aquatic bench. Stormwater runoff from all parking areas shall be directed to a stormwater management facility before it is discharged into a Primary Wellhead Protection Area.

29.87 Boundary Disputes. For primary wellhead protection area boundary determinations, a site-specific geological and hydro-geological analysis shall be performed by a State-registered professional geologist and shall be based upon thorough site investigation, subsurface testing and other testing as may be determined appropriate by the City of Dover.

29.9 Tier 1: Secondary Wellhead Protection Areas. Lands defined as Tier 1 lands, are areas which have been identified as Secondary Wellhead Protection Areas. Secondary Wellhead Areas extend a buffer of 150 feet radius from the well point located in an area of the confined aquifer.

29.91 Purpose and Intent. The purpose of this Secondary Wellhead Protection Areas is to safeguard the potable water resources of Dover and Kent County and to safeguard the public health, safety, and resources through regulation of land use and development within zones of protection surrounding potable water supply well fields.

29.92 Open Space. Areas within fifty (50) feet of the well shall be one hundred (100) percent open space.

29.93 New development within seventy-five (75) feet of the well must demonstrate that the new development will not produce, store, transfer or otherwise handle hazardous materials.

29.94 The natural runoff flowing into wellhead areas shall be allowed and all new stormwater run-off shall be diverted around the wellhead protection areas wherever practical.

29.10 Intergovernmental Coordination

29.101 Review. The City of Dover, through the Development Advisory Committee, will coordinate with the Kent Conservation District and DNREC as necessary to ensure compliance with the Source Water Protection Overlay Zone.

29.102 Memorandum of Understanding. A Memorandum of Understanding must be kept and maintained between the City and any review agencies which evaluate the implementation of the required elements of the Source Water Protection Overlay Zone through the Development Advisory Committee process.

29.11 Data Distribution

29.141 The digital delineation of this overlay zone will be provided upon written request. Distribution of this information will be governed by the City of Dover's Geographic Data Use and Distribution Policy.

29.12 Existing Development. Existing developed land which is located within the Source Water Protection Overlay Zone will be treated as a non-conforming use, subject to the provisions of Article 7.

29.13 Effective Date. The requirements of the Source Water Protection Overlay Zone shall apply to all site plan and subdivision applications filed after adoption of these requirements by City Council.