



STATE OF DELAWARE
EXECUTIVE DEPARTMENT
OFFICE OF STATE PLANNING COORDINATION

October 26, 2016

Mr. Frank Kea
Solutions IPEM
303 North Bedford St.
Georgetown, DE 19947

RE: PLUS review 2016-09-05; Cool Spring Mini Storage

Dear Frank:

Thank you for meeting with State agency planners on September 28, 2016 to discuss the proposed plans for the Cool Spring Mini Storage project. According to the information received you are seeking review of a site plan for 6,000 square feet of commercial space, 20,000 square feet of warehouse, and 106,050 square feet of mini-storage space on 0.54 acres along Rt. 9 in Sussex County.

Please note that changes to the plan, other than those suggested in this letter, could result in additional comments from the State. Additionally, these comments reflect only issues that are the responsibility of the agencies represented at the meeting. **The developers will also need to comply with any Federal, State, and local regulations regarding this property. We also note that as Sussex County is the governing authority over this land, the developers will need to comply with any and all regulations/restrictions set forth by the County.**

Strategies for State Policies and Spending

This project is located in Investment Level 3 according to the *Strategies for State Policies and Spending*. Investment Level 3 reflects areas where growth is anticipated by local, county, and state plans in the longer term future, or areas that may have environmental or other constraints to development. State investments may support future growth in these areas, but please be advised that the State has other priorities for the near future. We encourage you to design the site with respect for the environmental features which are present.

Code Requirements/Agency Permitting Requirements

Department of Transportation – Contact Bill Brockenbrough 760-2109

- The site access on US Route 9 must be designed in accordance with DeIDOT's Development Coordination Manual. A copy of the Manual is available at <http://www.deldot.gov/information/business/subdivisions/changes/index.shtml>.
- Pursuant to Section P.3 of the Manual, a Pre-Submittal Meeting is required before plans are submitted for review. This meeting was held on July 26, 2016.
- Section P.5 of the Manual addresses fees that are assessed for the review of development proposals. DeIDOT anticipates collecting the Initial Stage Fee when the record plan is submitted for review and the Construction Stage Fee when construction plans are submitted for review.
- Per Section 2.2.2.1 of the Manual, Traffic Impact Studies (TIS) are warranted for developments generating more than 500 vehicle trip ends per day or 50 vehicle trip ends per hour in any hour of the day. From the PLUS application, DeIDOT sees that the total daily trips are estimated at 517 vehicle trip ends per day. This figure is higher than expected estimating using the Institute of Transportation Engineers' Trip Generation Manual and DeIDOT would like to review the applicant's trip generation estimate in detail. It may be that the warrants for a TIS are not met.

For developments generating less than 2,000 vehicle trip ends per day and less than 200 vehicle trip ends per hour, if the local government does not require a TIS, Section 2.2.2.2 of the Manual provides that DeIDOT may accept an Area Wide Study Fee, calculated by multiplying the daily trip generation by \$10, in lieu of requiring a TIS. If a TIS is warranted at all, DeIDOT is willing to accept a fee in lieu in this instance.

An Area Wide Study Fee, when accepted, is set aside for use in funding future traffic studies in the same county as the subject development. Payment of the Fee does not relieve the payer of responsibility for off-site improvements where DeIDOT has identified a need for improvements or from the need to provide a Traffic Operational Analysis (TOA) if DeIDOT determines in the plan review process that a TOA is needed to address a concern about the proposed site entrance. While US Route 9 east of Georgetown is seasonally congested, DeIDOT has not yet identified a need for specific off-site improvements that might be required of the applicant.

- Section 3.2.4.2 of the Manual addresses the placement of right-of-way monuments (markers) along the roads on which a property fronts, in this case US Route 9. Monuments sufficient to re-establish the permanent rights-of-way after the dedication

discussed below should be shown on the plan and provided in the field in accordance with this section.

- As necessary, in accordance with Section 3.2.5 and Figure 3.2.5-a of the Manual, DelDOT will require dedication of right-of-way along the site's frontage on US Route 9. By this regulation, this dedication is to provide a minimum of 40 feet of right-of-way from the road centerline. The following right-of-way dedication note is required, "**An X-foot wide right-of-way is hereby dedicated to the State of Delaware, as per this plat.**"
- In accordance with Section 3.2.5.1.2 of the Manual, DelDOT will require the establishment of a 15-foot wide permanent easement across the property frontage on US Route 9. The location of the easement shall be outside the limits of the ultimate right-of-way. The easement area can be used as part of the open space calculation for the site. The following note is required, "**A 15-foot wide permanent easement is hereby established for the State of Delaware, as per this plat.**"
- In accordance with Section 3.4 of the Manual, a record plan shall be prepared prior to issuing "Letter of No Objection". The following information will be required for the "Letter of No Objection" review:
 - Initial Stage Fee Calculation Form
 - Initial Stage Review Fee
 - Gate-Keeping Checklist – Site Plan
 - Design Checklist - Record Plan
 - Sight Distance Spreadsheet
 - Owners and Engineers' name and e-mail address
 - Record Plan
 - Conceptual Entrance Plan
 - Submission of the Area-Wide Study Fee (If applicable)
- Referring to Section 3.4.2.1 of the Manual, the following items, among other things, are required on the Record Plan:
 - A Traffic Generation Diagram. See Figure 3.4.2-a for the required format and content.
 - Depiction of all existing entrances within 600 feet of the proposed entrance.
 - Notes identifying the type of off-site improvements, agreements (signal, letter) contributions and when the off-site improvements are warranted. Presently we do not require any off-site improvements.
- Section 3.5 of the Manual provides DelDOT's requirements with regard to connectivity. The requirements in Sections 3.5.1 through 3.5.3 shall be followed for all development

projects having access to state roads or proposing DelDOT maintained public road for subdivisions.

- Section 3.5.4.2 of the Development Coordination Manual addresses requirements for shared-use paths and sidewalks. For projects in Level 3 Investment Areas, installation of paths or sidewalks along the frontage on State-maintained roads is at the discretion of DelDOT's Subdivision Engineer if the project does not about an existing facility. Having said that, because this project is in a developing area in which several shared-use paths have been constructed, this project will be required to install a shared-use path along the project's frontage. While the path shown on the plan appears to meet the standards shown in Section 3.5.4.2, we anticipate recommending that the developer extend the path to tie into the pavement of Breakwater Acres Lane to provide residents of Breakwater Acres better access to the path. As Breakwater Acres Lane is a private right-of-way, this connection would necessarily be contingent upon those residents granting the developer the use of the right-of-way for that purpose.
- In accordance with Section 3.8 of the Manual, storm water facilities, excluding filter strips and bioswales, shall be located a minimum of 20 feet from the ultimate State right-of-way along US Route 9. It appears that the plan presented does not meet this requirement.
- Referring to Section 4.3 of the Manual, an entrance plan shall be prepared prior to issuing entrance approval. The following information will be required for Entrance Plan review:
 - Construction Stage Fee Calculation Form
 - Construction Review Fee
 - Gate-Keeping Checklist – Entrance Plan
 - Design Checklist - Entrance Plan
 - Auxiliary Lane Spreadsheet
 - Entrance Plan
 - Pipe/Angle Spreadsheet (If applicable)
 - SWM Report and Calculations (If applicable)
- In accordance with Section 5.2.5.6 of the Manual, a separate turning template plan shall be provided to verify vehicles can safely enter and exit the site entrance. As per Section 5.2.3 of the Manual, the entrance shall be designed for the largest vehicle using the entrance.
- In accordance with Section 5.2.9 of the Manual, the Auxiliary Lane Worksheet should be used to determine whether auxiliary lanes are warranted at the site entrance and how long those lanes should be. The worksheet can be found at http://www.deldot.gov/information/business/subdivisions/auxiliary_lane_worksheet.xls. As discussed at the July 26, 2016 Pre-Submittal Meeting, this project will be required to construct a left-turn lane and a right-turn lane on US Route 9, The finished roadway shall

consist of 11-foot turn lanes and 12-foot through lanes.

- In accordance with Section 5.4 of the Manual, sight distance triangles are required and shall be established in accordance with American Association of State Highway and Transportation Officials (AASHTO) standards. A spreadsheet has been developed to assist with this task. It can be found at <http://www.deldot.gov/information/business/subdivisions/Intersection-Sight-Distance.xls>.
- In accordance with Section 5.14 of the Manual, all existing utilities must be shown on the plan and a utility relocation plan will be required for any utilities that need to be relocated.
- Section 6.4.3 of the Manual, which pertains to the inspection and acceptance of commercial entrances, applies. Construction inspection responsibilities shall be in accordance with Figure 6.4.3-a. DeIDOT's preliminary reading of this figure is that the project requires Level I inspection and that a construction inspection agreement will not be needed.
- Section 7.7.2 of the Manual addresses the need to provide 20-foot wide drainage easements for all storm drainage systems, open or closed, that fall outside the existing right-of-way or the drainage/utility easement. In accordance with this section, metes and bounds and total areas need to be shown for any drainage easements. The easements should be shown and noted on the record plan.

Department of Natural Resources and Environmental Control – Contact Michael Tholstrup 735-3352

Executive Summary

Upon reviewing the Cool Springs Mini Storage project, DNREC has identified opportunities to reduce the environmental impact and provide additional energy efficiency alternatives on-site.

There are concerns regarding the acreage of vegetation removal on site, as well as water quality concerns. This project is located in the Broadkill River Watershed, which has Total Maximum Daily Load requirements in place to maintain surface water quality and drinking water quality. The developer is encouraged to maintain as much existing vegetation on site as possible, minimize impervious surfaces within developed areas, use pervious pavement and use green infrastructure technologies where possible. These efforts will help to meet stormwater management requirements, protect the water quality and minimize impacts to habitat.

The State of Delaware is threatened by climate change and has a goal of reducing greenhouse gas emissions by 30 percent by 2030. Appropriate development and re-development that provides access to public transportation, opportunities to walk and bike to shopping and recreation, and that employs energy efficient building standards are among key strategies to meet these goals.

DNREC encourages the applicant to provide safe pedestrian and bike access to the site. The possibility of future access to the adjacent rail to trail project serves as further incentive to improve pedestrian access. DNREC also encourages the use of high performance building standards, consideration of alternative energy sources (such as solar and geothermal), and electric vehicle charging stations to promote clean sustainable energy and reduce greenhouse gas emissions. DNREC offers a number of financial incentives to help offset some of the costs involved with these investments, including the Delaware Alternative Fueling Infrastructure Grant and the Energy Efficiency investment Fund (EEIF).

The following pages provide information about code requirements and detailed recommendations associated with this project, from various DNREC Divisions. DNREC would like to be a partner in creating appropriate development that protects and highlights the environment as a natural amenity of the landscape. The Department has resources and expertise that are available to help make this a reality, often at no expense to the landowner. Contact information for specific offices are listed below or you can contact Michael Tholstrup at (302) 735-3352.

TMDLs

- The project is located in the greater Delaware River and Bay drainage area, specifically within the Broadkill River watershed. In this watershed, the State of Delaware has developed specific Total Maximum Daily Load (TMDL) pollutant reduction targets for nitrogen, phosphorus, and bacteria (under the auspices of Section 303(d) of the Clean Water Act). The TMDL for the Broadkill River watershed calls for a 40 percent reduction in nitrogen and phosphorus from baseline conditions. The TMDL also calls for a 75 percent reduction in bacteria from baseline conditions. A TMDL is the maximum level of pollution allowed for a given pollutant below which a “water quality limited waterbody” can assimilate and still meet State water quality standards (e.g., dissolved oxygen, nutrients, and bacteria; State of Delaware Surface Water Quality Standards, as amended July 11, 2004) to the extent necessary to support use goals such as, swimming, fishing, drinking water and shell fish harvesting.

Water Supply

- The information provided indicates that Artesian Water Company will provide water to the proposed project through a central water system. DNREC files reflect that Artesian Water Company does not currently hold a Certificate of Public Convenience and Necessity (CPCN) to provide public water in these areas. They will need to file an application for a CPCN with the Public Service Commission, if they have not done so already. Information on CPCN requirements and applications can be obtained by contacting the Public Service Commission at (302) 736-7500.
- Should dewatering points be needed during any phase of construction, a dewatering well construction permit must be obtained from the Water Supply Section prior to construction

of the well points. In addition, a water allocation permit will be needed if the pumping rate will exceed 50,000 gallons per day at any time during operation.

- All well permit applications must be prepared and signed by licensed water well contractors, and only licensed well drillers may construct the wells. Please factor in the necessary time for processing the well permit applications into the construction schedule. Dewatering well permit applications take approximately four weeks to process, which allows the necessary time for technical review and advertising. Should you have any questions concerning these comments, please contact Rick Rios, at (302) 739-9944.

Sediment and Erosion Control/Stormwater Management

- A detailed sediment and stormwater plan will be required prior to any land disturbing activity taking place on the site. Contact the reviewing agency to schedule a pre-application meeting to discuss the sediment and erosion control and stormwater management components of the plan. The site topography, soils mapping, pre- and post-development runoff, and proposed method(s) and location(s) of stormwater management should be brought to the meeting for discussion. The plan review and approval as well as construction inspection will be coordinated through the Sussex Conservation District. Contact the Sussex Conservation District at (302) 856-7219 for details regarding submittal requirements and fees.

Air Quality.

- The applicant shall comply with all applicable Delaware air quality regulations. Please note that the following regulations in Table 1 – Potential Regulatory Requirements may apply to your project:

Table 1: Potential Regulatory Requirements	
Regulation	Requirements
7 DE Admin. Code 1106 - Particulate Emissions from Construction and Materials Handling	<ul style="list-style-type: none"> • Use dust suppressants and measures to prevent transport of dust off-site from material stockpile, material movement and use of unpaved roads. • Use covers on trucks that transport material to and from site to prevent visible emissions.
7 DE Admin. Code 1113 – Open Burning	<ul style="list-style-type: none"> • Prohibit open burns statewide during the Ozone Season from May 1-Sept. 30 each year. • Prohibit the burning of land clearing debris. • Prohibit the burning of trash or building materials/debris.

<p>7 DE Admin. Code 1135 – Conformity of General Federal Actions to the State Implementation Plan</p>	<ul style="list-style-type: none"> • Require, for any “federal action,” a conformity determination for each pollutant where the total of direct and indirect emissions would equal or exceed any of the de minimus levels (See Section 3.2.1)
<p>7 DE Admin. Code 1141 – Limiting Emissions of Volatile Organic Compounds from Consumer and Commercial Products</p>	<ul style="list-style-type: none"> • Use structural/ paint coatings that are low in Volatile Organic Compounds. • Use covers on paint containers when paint containers are not in use.
<p>7 DE Admin. Code 1144 – Control of Stationary Generator Emissions</p>	<ul style="list-style-type: none"> • Ensure that emissions of nitrogen oxides (NO_x), non-methane hydrocarbons (NMHC), particulate matter (PM), sulfur dioxide (SO₂), carbon monoxide (CO), and carbon dioxide (CO₂) from emergency generators meet the emissions limits established. (See section 3.2). • Maintain recordkeeping and reporting requirements.
<p>7 DE Admin. Code 1145 – Excessive Idling of Heavy Duty Vehicles</p>	<ul style="list-style-type: none"> • Restrict idling time for trucks and buses having a gross vehicle weight of over 8,500 pounds to no more than three minutes.

For a complete listing of all Delaware applicable regulations, please look at our website: <http://www.awm.delaware.gov/AQM/Pages/AirRegulations.aspx>.

Hazardous Waste Management

- If it is determined by the Department that there was a release of a hazardous substance on the property in question and the Department requires remediation pursuant to the Hazardous Substance Cleanup Act, the provisions of 7 Del.C. Chapter 91, Delaware Hazardous Substance Cleanup Act and the Delaware Regulations Governing Hazardous Substance Cleanup shall be followed.

Tank Management

- If a release of a Regulated Substance occurs at the proposed project site, compliance with 7 Del.C., Chapter 60; 7 Del.C., Chapter 74; and DE Admin. Code 1351, State of

Delaware *Regulations Governing Underground Storage Tank Systems* (the UST Regulations) is required.

- Per the UST Regulations: Part E, § 1. Reporting Requirements: Any indication of a Release of a Regulated Substance that is discovered by any Person, including but not limited to environmental consultants, contractors, utility companies, financial institutions, real estate transfer companies, UST Owners or Operators, or Responsible Parties shall be reported within 24 hours to:
 - The Department's 24-hour Release Hot Line by calling (800) 662-8802; and
 - The DNREC Tank Management Section by calling (302) 395-2500.

Delaware State Fire Marshall's Office – Contact Duane Fox 739-4394

At the time of formal submittal, the applicant shall provide; completed application, fee, and three sets of plans depicting the following in accordance with the Delaware State Fire Prevention Regulation (DSFPR):

- **Fire Protection Water Requirements:**
 - Water distribution system capable of delivering at least 1500 gpm for 2-hour duration, at 20-psi residual pressure is required. Fire hydrants with 800 feet spacing on centers. For the Mini-Storage area, the water distribution system needs to be capable of delivering at least 750 gpm for 1-hour duration
 - Where a water distribution system is proposed for (Storage/Industrial/Mercantile) sites, the infrastructure for fire protection water shall be provided, including the size of water mains for fire hydrants and sprinkler systems.
- **Fire Protection Features:**
 - All structures over 10,000 sq. ft. aggregate will require automatic sprinkler protection installed.
 - Buildings greater than 10,000 sq. ft 3-stories or more, over 35 feet, or classified as High Hazard, are required to meet fire lane marking requirements
 - All mini-storage buildings greater than 2500 sq. ft throughout or where any of the individual storage units are separated by less than 1-hour fire resistance-rated barrier, will require automatic sprinkler system installed
 - Show Fire Department Connection location (Must be within 300 feet of fire hydrant), and detail as shown in the DSFPR.
 - Show Fire Lanes and Sign Detail as shown in DSFPR
- **Accessibility**
 - All premises, which the fire department may be called upon to protect in case of fire, and which are not readily accessible from public roads, shall be provided with suitable gates and access roads, and fire lanes so that all buildings on the premises are

accessible to fire apparatus. This means that access throughout the premises must be such that fire department apparatus may negotiate it.

- Fire department access shall be provided in such a manner so that fire apparatus will be able to locate within 100 ft. of the front door.
 - The use of speed bumps or other methods of traffic speed reduction must be in accordance with Department of Transportation requirements.
 - The local Fire Chief, prior to any submission to our Agency, shall approve in writing the use of gates that limit fire department access into and out of the development or property.
- **Required Notes:**
 - Provide a note on the final plans submitted for review to read “ All fire lanes, fire hydrants, and fire department connections shall be marked in accordance with the Delaware State Fire Prevention Regulations”
 - Proposed Use
 - Alpha or Numerical Labels for each building/unit for sites with multiple buildings/units
 - Square footage of each structure (Total of all Floors)
 - National Fire Protection Association (NFPA) Construction Type
 - Maximum Height of Buildings (including number of stories)
 - Note indicating if building is to be sprinklered
 - Name of Water Provider
 - Letter from Water Provider approving the system layout
 - Provide Lock Box Note (as detailed in DSFPR) if Building is to be sprinklered
 - Provide Road Names, even for County Roads

State Historic Preservation Office – Contact Terrence Burns 736-7404

- There are known archaeological sites or a National Register listed property, on this parcel. However, the developer should be aware of the Unmarked Burials and Human Skeletal Remains Law.
- Abandoned or unmarked family cemeteries are very common in the State of Delaware. They are usually in rural or open space areas, and sometimes near or within the boundary of an historic farm site. Even a marked cemetery can frequently have unmarked graves or burials outside of the known boundary line or limit. Disturbing unmarked graves or burials triggers the Unmarked Human Burials and Human Skeletal Remains Law (Del. Code: Title 7, Chapter 54); and such remains or discoveries can result in substantial delays while the procedures required under this law are carried out. If there is a discovery of any unmarked graves, burials or a cemetery, it is very costly to have them archaeologically excavated and the burials moved. The Division of Historical & Cultural Affairs recommends that owners and/or developers have a qualified archaeological consultant investigate their project area, to the full extent, to see if there is any unmarked cemetery, graves, or burial sites. In the event of such a discovery, the Division of Historical & Cultural Affairs also recommends that the plans be re-drawn to leave the full

extent of the cemeteries or any burials on its own parcel or in the open space area of the development, with the responsibility for its maintenance lying with the landowner association or development. If you would like to know more information pertaining to unmarked human remains or cemeteries, please go to the following websites for additional information: www.history.delaware.gov/preservation/umhr.shtml and www.history.delaware.gov/preservation/cemeteries.shtml

Therefore, prior to any demolition or ground-disturbing activities, the developer should hire an archaeological consultant, to examine the parcel for archaeological resources and plan to avoid those sites or areas. If there is any federal involvement with the project, in the form of licenses, permits, or funds, the federal agency through its client, is responsible for complying with Section 106 of the National Historic Preservation Act (36 CFR 800) and must consider their project's effects on any known or potential cultural or historic resources. Owners and developers who may plan to apply for an Army Corps of Engineers permit or for federal funding, such as HUD or USDA grants, should be aware of the National Historic Preservation Act of 1966 (as amended). Regulations promulgated for Section 106 of this Act stipulate that no ground-disturbing or demolition activities should take place before the Corps or other involved federal agency determines the area of potential effect of the project undertaking. These stipulations are in place to allow for comment from the public, the Delaware State Historic Preservation Office, and the Advisory Council for Historic Preservation about the project's effects on historic properties. Furthermore, any preconstruction activities without adherence to these stipulations may jeopardize the issuance of any permit or funds. If you need further information or additional details pertaining to the Section 106 process and the Advisory Council's role, please review the Advisory Council's website at www.achp.gov.

Recommendations/Additional Information

This section includes a list of site specific suggestions that are intended to enhance the project. These suggestions have been generated by the State Agencies based on their expertise and subject area knowledge. **These suggestions do not represent State code requirements.** They are offered here in order to provide proactive ideas to help the applicant enhance the site design, and it is hoped (**but in no way required**) that the applicant will open a dialogue with the relevant agencies to discuss how the suggestions can benefit the project.

Department of Transportation – Contact Bill Brockenbrough 760-2109

- DelDOT is working to establish a bicycle and pedestrian trail along the right-of-way of the Delaware Coast Line Railroad, the low-volume rail line that runs between Lewes and Georgetown. Phase I of this effort, east of Savannah Road, is nearly complete and we are designing Phase II, from Savannah Road to Minos Conaway Road. We have yet to schedule a phase that would include the tracks adjoining the subject parcel but preliminarily we believe we may need an additional 15 feet of right-of-way beyond what we own now.

To minimize disruption to the mini-storage facility from the future project, DelDOT recommends that the applicant provide a 15-foot buffer between the current railroad right-of-way line and any essential elements of the facility, such as Infiltration Basin 3. As necessary, the applicant's engineer may contact Mr. Anthony Aglio, in DelDOT's Local Systems Planning Section, at (302) 760-2509 for information regarding the trail.

- The applicant should expect a requirement that any substation and/or wastewater facilities will be required to have access from an internal driveway with no direct access to US Route 9.
- The applicant should expect a requirement that all PLUS and Technical Advisory Committee (TAC) comments be addressed prior to submitting plans for review.
- Section 3.5.5.1 of the Manual provides that DelDOT or Delaware Transit Corporation (DTC) may require industrial uses larger than 150,000 square feet to provide either a transit stop on-site or adjacent to the site, or a pedestrian connection to an existing transit stop. While the floor area of the proposed development is less than 150,000 square feet, it is large enough to consider installing a stop if there is not one nearby. The proposed development is located on DART Route 206, which provides service along US Route 9 between Lewes and Georgetown. We recommend that the developer's engineer contact Ms. Catherine Smith, Planning Manager in DTC's Service Development Section, to determine what transit-related facilities should be provided. Ms. Smith may be reached at (302) 576-6071.
- Please be advised that DelDOT adopted an update of the Development Coordination Manual effective April 11, 2016. While in most respects, the changes are incremental, they are located throughout the Manual and could have some effect on the entrance designs.
- Effective August 1, 2015, all new plan submittals and re-submittals, including major, minor and commercial plans, shall now be uploaded via the PDCA (Planning Development Coordination Application) with any fees paid online via credit card or electronic check. The design firm making the submittal must create the project in the PDCA and upload all the required items to allow DelDOT to start the review process. Guidance on how to do this is available on our website at <http://www.deldot.gov/information/business/subdivisions/>
- Be advised that the Standard General Notes have been updated and posted to the DelDOT website. Please begin using the new versions and look for the revision date of August 31, 2016. The notes can be found at <http://www.deldot.gov/information/business/subdivisions/>

Department of Natural Resources and Environmental Control – Michael Tholstrup 735-3352

Additional information on TMDLs and water quality

- In response to concerns about the need for reducing nonpoint source nutrient (nitrogen and phosphorus) and bacterial pollutants to levels sufficient to meet the TMDL reduction requirements prescribed for waters of the greater Broadkill River watershed, a multifaceted and comprehensive process known as a Pollution Control Strategy (PCS) was developed. Specifically, a PCS is a combination of best management practices and control technologies that reduce nutrient and bacterial pollutant runoff loading in waters of a given watershed to level(s) consistent with the TMDL(s) reduction levels specified for that watershed. The PCS for the Broadkill River watershed consists of recommendations from the following three areas: agriculture, stormwater, and wastewater. Additional information about Broadkill River PCS can be reviewed here: <http://www.dnrec.delaware.gov/swc/wa/Pages/WatershedManagementPlans.aspx>

In further support of the PCS, the applicant is strongly urged to reduce nutrient and bacterial pollutants through voluntary commitment to the implementation of the following recommended BMPs:

- Preserve and/or maintain as much of the existing forest cover as possible. The applicant/developer is proposing to remove the entirety of the forest cover in this parcel. We believe that this is excessive and should be substantially reduced (at least by 50 percent). Removing large amounts of intact forest will contribute to a further decline in observed water quality in waters of the greater Broadkill River watershed.
- Calculate post-construction surface imperviousness with all forms of created (or constructed) surface imperviousness (e.g., rooftops, driveways, parking lots, sidewalks, open-water storm water management structures, ponds, and roads) included in the calculation. Omission of any of the above-stated forms of surface imperviousness will result in an underestimate of the actual post-development surface imperviousness and the associated environmental impacts.
- Employ green-technology storm water management including rain gardens (in lieu of open-water management structures) as BMPs to mitigate or reduce nutrient and bacterial pollutant runoff. Please contact Lara Allison at (302) 739-9939 for further information about the possibility of installing rain gardens on this parcel.
- Use pervious paving materials (when compatible or consistent with water quality concerns in areas of excellent recharge and/or well-head protection as determined by a DNREC hydrogeologist) instead of conventional paving materials such as asphalt or concrete, to help reduce the amount of water and pollutant runoff draining to adjoining streams and wetlands.

- Assess nutrient and bacterial pollutant loading at the preliminary project design phase. To this end, the Watershed Assessment Section has developed a methodology known as the “Nutrient Load Assessment protocol.” The protocol is a tool used to assess changes in nutrient loading (e.g., nitrogen and phosphorus) resulting from the conversion of individual or combined land parcels to a changed land use; thus providing applicants and governmental entities with quantitative information about the project’s impact(s) on baseline water quality. We strongly encourage the applicant/developer to use this protocol to help design and implement the most effective BMPs. Please contact John Martin or Jen Walls in the Division of Watershed Stewardship, at (302) 739-9939 for more information on the protocol.

Additional information on tank management

- When contamination is encountered, PVC pipe materials should be replaced with ductile steel and nitrile rubber gaskets in the contaminated areas.
- If any aboveground storage tanks (ASTs) less than 12,500 gallons are installed, they must be registered with the TMS. If any ASTs greater than 12,500 gallons are installed, they are also subject to installation approval by the TMS.
- DNREC-TMS encourages the use of Best Management Practices (BMPs) in considering all environmental effects of activities and implementation and incorporating options to minimize the environmental footprints of activities. For more information, please visit online: <http://www.dnrec.delaware.gov/tanks/Pages/default.aspx> or contact Ross D. Elliott at DNREC-TMS with further questions at (302) 395-2500, or by email: Ross.Elliott@state.de.us

Additional information on hazardous waste management

- DNREC strongly recommends that the land owner perform environmental due diligence of the property by performing a Phase I Environmental Site Assessment (including a title search to identify environmental covenants) in accordance to Section 9105(c) (2) of the Delaware Hazardous Substance Cleanup Act (HSCA). While this is not a requirement under HSCA, it is good business practice and failure to do so will prevent a person from being able to qualify for a potential affirmative defense under Section 9105(c) (2) of HSCA.
- Additional remediation may be required if the project property or site is re-zoned by the county.
- Should a release or imminent threat of a release of hazardous substances be discovered during the course of development (e.g., contaminated water or soil), construction activities should be discontinued immediately and DNREC should be notified at the 24-hour emergency number (800) 662-8802. SIRS should also be contacted as soon as possible at (302) 395-2600 for further instructions.

Additional information on air quality

- Based on the information provided, the mobile source emissions (attributed to vehicle trips) were quantified. Table 2 – Projected Air Quality Emissions represents the actual impact the Cool Spring Mini Storage project may have on air quality.

Table 2: Projected Air Quality Emissions for Cool Spring Mini Storage (Based on projected estimate of 517 trips during peak season)					
Emissions Attributable to Cool Springs Mini Storage (Tons per Year)	Volatile Organic Compounds (VOC)	Nitrogen Oxides (NOx)	Sulfur Dioxide (SO ₂)	Fine Particulate Matter (PM _{2.5})	Carbon Dioxide (CO ₂)
Mobile emissions	1.8965765	0.006852	*	*	*

(*) Indicates data is not available.

Note that emissions associated with the actual construction, including automobile and truck traffic from working in, or delivering products to the site, as well as site preparation, earth moving activities, road paving and other miscellaneous air emissions, are not reflected in the table above.

- DNREC’s Division of Air Quality (DAQ) encourages planners, developers and builders to consider all sustainable growth practices in future development. We further believe that all air quality impacts should be completely considered as new developments are considered by your town. New developments may emit, or cause to be emitted, additional air contaminants into Delaware’s air, which will negatively impact public health, safety and welfare. These negative impacts are attributable to:
 - Emissions that form ozone and fine particulate matter; Sussex County currently violates 2008 standards for ozone.
 - The emission of greenhouse gases which are associated with climate change, and
 - The emission of air toxics.

Air emissions generated from new development include emissions from the following activities:

- Area sources such as painting, maintenance equipment and the use of consumer products like roof coatings and roof primers.
- The generation of electricity, and
- All transportation activity – such as increased vehicular traffic.

- **Urban tree canopy:** Some green streetscape elements that the Cool Springs Mini Storage could incorporate are street trees or urban trees. Native trees reduce emissions by trapping dust particles and replenishing oxygen. Trees also reduce energy emissions by cooling during the summer and by providing wind breaks in the winter, whereby reducing air conditioning needs by up to 30 percent and saving 20 to 50 percent on fuel costs.

- **Energy Efficient Options:** Constructing with only energy efficient products can help your facility immensely, not only in terms of environmental sustainability but financially. Energy Star qualified products are up to 30 percent more energy efficient. Savings come from building envelope upgrades, high performance windows, controlled air infiltration, upgraded heating and air conditioning systems, tight duct systems and upgraded water-heating equipment. Every percentage of energy efficiency translates into a percent reduction in pollution. The Energy Star Program is an excellent way to save on energy costs and reduce air pollution. Providing shade for parking areas can also be of added benefit to this facility. Some approaches may include architectural devices, vegetation, or solar panels. Providing shade for parking areas helps to reduce heat island impacts, and, by extension, helps to minimize the potential for localized ground-level ozone formation. Such measures can also have the additional benefit of channeling or infiltrating storm water. For more about energy efficient options, please see: <https://www.energystar.gov/> or <https://www.epa.gov/greeningepa/energy-efficiency-epa>.

- **Multi-modal travel:** A component of improving existing air quality levels is to maximize multi-modal travel through bike lanes, sidewalks and convenient access to transit opportunities. The DAQ encourages the developer to add sharrows or bike lanes and bike racks where needed to encourage multi-modal travel opportunities (Sharrows and striping are the easiest and most cost effective option). The DAQ was pleased to see the inclusion of both existing and proposed sidewalks in the site plan, and proximity to a transit route (DART Bus Route 206). The possibility of a future rail to trail project adjacent to this property will further increase the need for pedestrian access and amenities. Multi-modal travel can significantly reduce mobile source emissions. For every vehicle trip that is replaced by the use of a sidewalk or bike path, 7 pounds of VOC and 11.5 pounds of NOx are reduced each year. For more information on multimodal opportunities in your area, please refer to the Delaware Transit Corporation and DelDOT Gateway websites at www.dartfirststate.com and http://deldot.gov/information/community_programs_and_services/gate/. Also, for more information on the impacts of multimodal access on air quality please see the EPA's website at: <https://www3.epa.gov/otaq/>.

- **Clean Fuel Measures:** This measure helps to reduce localized air pollution by supporting the use of non-gasoline powered vehicles. It is recommended that alternative fueling or charging stations be provided at this facility to minimize environmental impacts from idling and the transferring of goods and materials by vehicle. The nearest alternative fueling facility is located 7.6 miles to the east of the development site, off of Route 1, in Rehoboth, Delaware. This location offers Level 2 Electric Chargers. Installing on-site electric vehicle charging stations is another strategy that promotes clean fuel usage. Please refer to the US Department of Energy's website for electric vehicle readiness information: http://www1.eere.energy.gov/cleancities/electric_vehicle_projects.html. For a site map of local alternative fueling sites, please visit the Alternative Fuels Data Center website here: <http://www.afdc.energy.gov/locator/stations/>.
- **Facility Beautification:** Lastly, the developer is encouraged to beautify the development site with landscaping that would not only make the mini-storage facility more attractive but also help to clean the air of any pollutants that could be emitted by human activity at the mini storage (such as vehicles coming in and going out of the facility). This would reduce its impact on the surrounding community while also incorporating a context-sensitive design that blends well with the surrounding development and existing land uses.

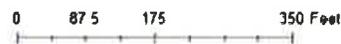
Should the applicant have any questions or like to discuss the emission mitigation measures that will be incorporated into the Cool Spring Mini Storage project, the DAQ point of contact is Lauren DeVore, and she may be reached at (302) 739-9437 or lauren.devore@state.de.us. We look forward to working together with you on this project to achieve our shared air quality goals!

Soils Assessment

- Based on NRCS soils survey mapping update, Ingleside (IeA) and Pepperbox-Rosedale complex (PsA) are the primary soils in the immediate vicinity of the proposed construction (Figure 1). Ingleside and Pepperbox-Rosedale complex are well-drained and moderately well-drained soils, respectively. Limitations for development are few to moderate.



Figure 1: NRCS soil survey mapping update in the immediate vicinity of the proposed construction



Delaware State Fire Marshall’s Office – Contact Duane Fox 739-4394

- Preliminary meetings with fire protection specialists are encouraged prior to formal submittal. Please call for appointment. Applications and brochures can be downloaded from our website: www.statefiremarshal.delaware.gov, technical services link, plan review, applications or brochures.

Following receipt of this letter and upon filing of an application with the local jurisdiction, the applicant shall provide to the local jurisdiction and the Office of State Planning Coordination a written response to comments received as a result of the pre-application process, noting whether comments were incorporated into the project design or not and the reason therefore.

Thank you for the opportunity to review this project. If you have any questions, please contact me at 302-739-3090.

Sincerely,



Constance C. Holland, AICP

Director, Office of State Planning Coordination

CC: Sussex County