**Plans, specifications and supporting documents shall be prepared in accordance with** [**15A NCAC 02L .0100**](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2002%20-%20environmental%20management/subchapter%20l/subchapter%20l%20rules.pdf)**,** [**15A NCAC 02T .0100**](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2002%20-%20environmental%20management/subchapter%20t/subchapter%20t%20rules.pdf)**,** [**15A NCAC 02T .1000**](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2002%20-%20environmental%20management/subchapter%20t/subchapter%20t%20rules.pdf)**,** [**Division Policies**](http://deq.nc.gov/about/divisions/water-resources/water-resources-permits/wastewater-branch/non-discharge-permitting-unit/policies) **and** [**good engineering practices**](http://www.ncbels.org/rulesandlaws.html)**. Failure to submit all required items will necessitate additional processing and review time.**

##### *For more information, visit the Water Quality Permitting Section’s Non-Discharge Permitting Unit* [*website*](https://deq.nc.gov/about/divisions/water-resources/water-resources-permits/wastewater-branch/non-discharge-permitting)

**General** – When submitting an application to the Water Quality Permitting Section’s Non-Discharge Permitting Unit, please use the following instructions as a checklist in order to ensure all required items are submitted. Adherence to these instructions and checking the provided boxes will help produce a quicker review time and reduce the amount of requested additional information.

Unless otherwise noted, the Applicant shall submit one original and two copies of the application and supporting documentation.

1. **Cover Letter** (All Application Packages):

[ ]  List all items included in the application package, as well as a brief description of the requested permitting action.

1. **Application Fee** (All New and Major Modification Application Packages):

[ ]  Submit a check, money order or electronic funds transfer made payable to: North Carolina Department of Environmental Quality (NCDEQ). The appropriate fee amount for new and major modification applications may be found at: [Standard Review Project Fees](https://deq.nc.gov/about/divisions/water-resources/water-resources-permits/wastewater-branch/non-discharge-permitting-unit/fees).

1. **Closed-Loop Recycle Systems (FORM: CLRS 06-16) Application** (All Application Packages):

[ ]  Submit the completed and appropriately executed Closed-Loop Recycle Systems (FORM: CLRS 06-16) application. Any unauthorized content changes to this form shall result in the application package being returned. If necessary for clarity or due to space restrictions, attachments to the application may be made, as long as the attachments are numbered to correspond to the section and item to which they refer.

[ ]  If the Applicant Type in Item I.2. is a corporation or company, provide documentation it is registered for business with the [North Carolina Secretary of State](http://sosnc.gov/search/index/corp).

[ ]  If the Applicant Type in Item I.2. is a partnership or d/b/a, enclose a copy of the certificate filed with the Register of Deeds in the county of business.

[ ]  The facility name in Item II.1. shall be consistent with the facility name on the plans, specifications, agreements, etc.

[ ]  The Professional Engineer’s Certification on Page 7 of the application shall be signed, sealed and dated by a [North Carolina licensed Professional Engineer](https://www.membersbase.com/ncbels-vs/public/searchdb.asp).

[ ]  The Applicant’s Certification on Page 7 of the application shall be signed in accordance with [15A NCAC 02T .0106(b)](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2002%20-%20environmental%20management/subchapter%20t/15a%20ncac%2002t%20.0106.pdf). Per [15A NCAC 02T .0106(c)](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2002%20-%20environmental%20management/subchapter%20t/15a%20ncac%2002t%20.0106.pdf), an alternate person may be designated as the signing official if a delegation letter is provided from a person who meets the criteria in [15A NCAC 02T .0106(b)](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2002%20-%20environmental%20management/subchapter%20t/15a%20ncac%2002t%20.0106.pdf).

* If this project is for a renewal without modification, use the [Non-Discharge System Renewal (FORM: NDSR)](https://ncdenr.s3.amazonaws.com/s3fs-public/Water%20Quality/Aquifer%20Protection/LAU/NDSR%2006-16.docx) application.
* Certain existing closed-loop facilities may be deemed permitted under Rule [15A NCAC 02T .1003](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2002%20-%20environmental%20management/subchapter%20t/15a%20ncac%2002t%20.1003.pdf). Follow the instructions in the [Closed-Loop Recycle System Rescission Request (FORM: CLRSRR)](https://ncdenr.s3.amazonaws.com/s3fs-public/Water%20Quality/Aquifer%20Protection/LAU/CLRS/CLRSRR%2006-16.pdf) application to determine if your facility is deemed permitted.
1. **Property Ownership Documentation** (All Application Packages):
* Per [15A NCAC 02T .1004(d)](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2002%20-%20environmental%20management/subchapter%20t/15a%20ncac%2002t%20.1004.pdf), the Applicant shall demonstrate they are the owner of all property containing the wastewater treatment and recycle facilities:

[ ]  Legal documentation of ownership (i.e., [GIS](http://www.lib.ncsu.edu/gis/counties.html), deed or article of incorporation), or

[ ]  Written notarized intent to purchase agreement signed by both parties with a plat or survey map, or

[ ]  Written notarized lease agreement that specifically indicates the intended use of the property and has been signed by both parties, as well as a plat or survey map. Lease agreements shall adhere to the requirements of [15A NCAC 02L .0107](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2002%20-%20environmental%20management/subchapter%20l/15a%20ncac%2002l%20.0107.pdf).

[ ]  Provide all agreements, easements, setback waivers, etc. that have a direct impact on the wastewater treatment, conveyance, storage and recycle facilities.

1. **Water Balance** (All Application Packages that include new or modified recycling systems, or changes in flow/storage):

[ ]  Per [15A NCAC 02T .1004(b)(4)](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2002%20-%20environmental%20management/subchapter%20t/15a%20ncac%2002t%20.1004.pdf), submit a water balance that has been signed, sealed and dated by a qualified professional and includes at a minimum:

[ ]  At least a two-year iteration of data computation that considers precipitation into and evaporation from all open atmosphere storage impoundments, and uses a variable number of days per month.

[ ]  Precipitation based on the 80th percentile and a minimum of 30 years of observed data.

[ ]  Potential Evapotranspiration (PET) using the Thornthwaite method, or another approved methodology, using a minimum of 30 years of observed temperature data.

1. **Engineering** **Plans** (All Application Packages):

[ ]  Per [15A NCAC 02T .1004(b)(1)](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2002%20-%20environmental%20management/subchapter%20t/15a%20ncac%2002t%20.1004.pdf), submit standard size and 11 x 17-inch engineering plan sets that have been signed, sealed and dated by a [North Carolina licensed Professional Engineer](https://www.membersbase.com/ncbels-vs/public/searchdb.asp), and shall include at a minimum:

[ ]  Table of contents with each sheet numbered.

[ ]  A general location map with at least two geographic references and a vicinity map.

[ ]  A process and instrumentation diagram showing all flow, chemical, electrical and wasting paths.

[ ]  Plan and profile views of all treatment and storage units, including their piping, valves, and equipment (i.e., pumps, blowers, mixers, diffusers, flow meters, etc.), as well as their dimensions and elevations.

[ ]  Details of all piping, valves, pumps, blowers, mixers, diffusers, recording devices, fencing, auxiliary power, etc.

[ ]  A hydraulic profile from the treatment plant headworks to the highest recycle point.

[ ]  Plans shall represent a completed design and not be labeled with preliminary phrases (e.g., FOR REVIEW ONLY, NOT FOR CONSTRUCTION, etc.) that indicate they are anything other than final specifications. However, the plans may be labeled with the phrase: FINAL DESIGN - NOT RELEASED FOR CONSTRUCTION.

1. **Specifications** (All Application Packages):

[ ]  Per [15A NCAC 02T .1004(b)(2)](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2002%20-%20environmental%20management/subchapter%20t/15a%20ncac%2002t%20.1004.pdf), submit specifications that have been signed, sealed and dated by a [North Carolina licensed Professional Engineer](https://www.membersbase.com/ncbels-vs/public/searchdb.asp), and shall include at a minimum:

[ ]  Table of contents with each section/page numbered.

[ ]  Detailed specifications for each treatment/storage/recycle unit, as well as all piping, valves, equipment (i.e., pumps, blowers, mixers, diffusers, flow meters, etc.), audible/visual high water alarms, liner material, etc.

[ ]  Site Work (i.e., earthwork, clearing, grubbing, excavation, trenching, backfilling, compacting, fencing, seeding, etc.)

[ ]  Materials (i.e., concrete, masonry, steel, painting, method of construction, etc.)

[ ]  Electrical (i.e., control panels, transfer switches, automatically activated standby power source, etc.)

[ ]  Means for ensuring quality and integrity of the finished product, including leakage, pressure and liner testing.

[ ]  Specifications shall represent a completed design and not be labeled with preliminary phrases (e.g., FOR REVIEW ONLY, NOT FOR CONSTRUCTION, etc.) that indicate they are anything other than final specifications. However, the specifications may be labeled with the phrase: FINAL DESIGN - NOT RELEASED FOR CONSTRUCTION.

1. **Engineering Calculations** (All Application Packages):

[ ]  Per [15A NCAC 02T .1004(b)(3)](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2002%20-%20environmental%20management/subchapter%20t/15a%20ncac%2002t%20.1004.pdf), submit engineering calculations that have been signed, sealed and dated by a [North Carolina licensed Professional Engineer](https://www.membersbase.com/ncbels-vs/public/searchdb.asp), and shall include at a minimum:

[ ]  Hydraulic and pollutant loading calculations for each treatment unit demonstrating how the designed effluent concentrations in Application Item V.1. were determined.

[ ]  Sizing criteria for each treatment unit and associated equipment (i.e., blowers, mixers, flow meters, pumps, etc.).

[ ]  Total and effective storage calculations for each storage unit.

[ ]  Friction/total dynamic head calculations and system curve analysis for each pump used.

[ ]  Manufacturer’s information for all treatment units, pumps, blowers, mixers, diffusers, flow meters, etc.

[ ]  Flotation calculations for all treatment and storage units constructed partially or entirely below grade.

[ ]  Documentation that adequate freeboard is provided to ensure containment of the 25-year, 24-hour storm event and continues to ensure structural integrity of the unit (Consideration should be given to drainage area, slope, soils, impervious areas, etc.).

[ ]  A demonstration that the specified auxiliary power source is capable of powering all essential treatment units.

1. **Site Map** (All Application Packages):

[ ]  Per [15A NCAC 02T .1004(c)](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2002%20-%20environmental%20management/subchapter%20t/15a%20ncac%2002t%20.1004.pdf), submit standard size and 11 x 17-inch site maps that have been signed, sealed and dated by a [North Carolina licensed Professional Engineer and/or Professional Land Surveyor](https://www.membersbase.com/ncbels-vs/public/searchdb.asp), and shall include at a minimum:

[ ]  A scaled map of the site with topographic contour intervals not exceeding 2 feet and showing all facility-related structures and fences within the wastewater treatment, storage and recycle areas.

[ ]  The location of all wells (including usage and construction details if available), streams (ephemeral, intermittent, and perennial), springs, lakes, ponds, and other surface drainage features within 500 feet of all wastewater treatment, storage and recycle sites.

[ ]  Delineation of the compliance and review boundaries per [15A NCAC 02L .0107](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2002%20-%20environmental%20management/subchapter%20l/15a%20ncac%2002l%20.0107.pdf) and [.0108](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2002%20-%20environmental%20management/subchapter%20l/15a%20ncac%2002l%20.0108.pdf).

[ ]  Setbacks as required by [15A NCAC 02T .1006](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2002%20-%20environmental%20management/subchapter%20t/15a%20ncac%2002t%20.1006.pdf).

[ ]  Site property boundaries within 500 feet of all wastewater treatment, storage and recycle sites.

[ ]  All habitable residences or places of public assembly within 500 feet of all treatment, storage and recycle sites.

NOTE – For clarity, multiple site maps of the facility with cut sheet annotations may be submitted.

1. **Power Reliability Plan** (All Application Packages):

[ ]  Per [15A NCAC 02T .1005(b)(3)](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2002%20-%20environmental%20management/subchapter%20t/15a%20ncac%2002t%20.1005.pdf), submit documentation of power reliability that shall consist of one of the following:

[ ]  An automatically activated standby power supply onsite that is capable of powering all essential treatment units under design conditions; or

[ ]  The ability to conduct a complete system shutdown; or

[ ]  Means to prevent improperly treated wastewater from entering a treated wastewater storage structure or from being recycled.

1. **Operation and Maintenance Plan** (All Application Packages):

[ ]  Per [15A NCAC 02T .1007](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2002%20-%20environmental%20management/subchapter%20t/15a%20ncac%2002t%20.1007.pdf), submit an operation and maintenance (O&M) plan encompassing all wastewater treatment, storage and recycle systems that shall include at a minimum a description of:

[ ]  Operation of the wastewater treatment, storage and recycle systems in sufficient detail to show what operations are necessary for the system to function and by whom the functions are to be conducted.

[ ]  Anticipated maintenance of the wastewater treatment, storage and recycle systems.

[ ]  Safety measures, including restriction of access to the site and equipment.

[ ]  Spill prevention provisions such as response to upsets and bypasses, including how to control, contain and remediate.

[ ]  Contact information for plant personnel, emergency responders and regulatory agencies.

NOTE – A final O&M Plan shall be submitted with the partial and/or final Engineering Certification required under [15A NCAC 02T .0116](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2002%20-%20environmental%20management/subchapter%20t/15a%20ncac%2002t%20.0116.pdf), however, a preliminary O&M Plan shall be submitted with each application package.

1. **Residuals Management Plan** (All Application Packages with new, expanding or replacement wastewater treatment systems):

[ ]  Per [15A NCAC 02T .1004(g)](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2002%20-%20environmental%20management/subchapter%20t/15a%20ncac%2002t%20.1004.pdf) and [.1008](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2002%20-%20environmental%20management/subchapter%20t/15a%20ncac%2002t%20.1008.pdf), submit a Residuals Management Plan that shall include at a minimum:

[ ]  A detailed explanation of how generated residuals (including trash, sediment and grit) will be collected, handled, processed, stored, treated, and disposed.

[ ]  An evaluation of the treatment facility’s residuals storage requirements based upon the maximum anticipated residuals production rate and ability to remove residuals.

[ ]  A permit for residuals utilization or a written commitment to the Applicant from a Permittee of a Department approved residuals disposal/utilization program that has adequate permitted capacity to accept the residuals or has submitted a residuals/utilization program application.

[ ]  If oil/grease removal and collection are a designed unit process, submit an oil/grease disposal plan detailing how the oil/grease will be collected, handled, processed, stored and disposed.

1. **Additional Documentation:**
* **Certificate of Public Convenience and Necessity** (All Application Packages for Privately-Owned Public Utilities):

[ ]  Per [15A NCAC 02T .0115(a)(1)](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2002%20-%20environmental%20management/subchapter%20t/15a%20ncac%2002t%20.0115.pdf) and [.1004(e)](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2002%20-%20environmental%20management/subchapter%20t/15a%20ncac%2002t%20.1004.pdf), provide the Certificate of Public Convenience and Necessity from the [North Carolina Utilities Commission](http://www.ncuc.commerce.state.nc.us/) demonstrating the Applicant is authorized to hold the utility franchise for the area to be served by the wastewater treatment and recycle system, or

[ ]  Provide a letter from the [North Carolina Utilities Commission’s Water and Sewer Division Public Staff](http://www.pubstaff.commerce.state.nc.us/pswater/pswater.htm) stating an application for a franchise has been received and that the service area is contiguous to an existing franchised area or that franchise approval is expected.

* **Existing Permit**  (All Modification Packages):

[ ]  Submit the most recently issued existing permit.

[ ]  Provide a list of any items within the permit the Applicant would like the Division to address during the permit modification (i.e., compliance schedules, permit description, monitoring, permit conditions, etc.).

* **Final Environmental Document** (All Application Packages using public monies or lands subject to the North Carolina Environmental Policy Act under [15A NCAC 01C .0100 to .0400](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2001%20-%20departmental%20rules/subchapter%20c/subchapter%20c%20rules.pdf)):

[ ]  Per [15A NCAC 02T .0105(c)(4)](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2002%20-%20environmental%20management/subchapter%20t/15a%20ncac%2002t%20.0105.pdf), submit one copy of the environmental assessment and three copies of the final environmental document (i.e., Finding of No Significant Impact or Record of Decision).

[ ]  Include information on any mitigating factors from the Environmental Assessment that impact the design and/or construction of the wastewater treatment and disposal system.

* **Floodway Regulation Compliance** (All Application Packages where any portion of the wastewater treatment, storage and recycle system is located within the 100-year floodplain):

[ ]  Per [15A NCAC 02T .0105(c)(8)](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2002%20-%20environmental%20management/subchapter%20t/15a%20ncac%2002t%20.0105.pdf), provide written documentation from all local governing entities that the facility is in compliance with all local ordinances regarding construction or operation of wastewater treatment and/or recycle facilities within the floodplain..

* **Threatened or Endangered Aquatic Species Documentation** (All Application Packages):

[ ]  Per [15A NCAC 02T .0105(c)(10)](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2002%20-%20environmental%20management/subchapter%20t/15a%20ncac%2002t%20.0105.pdf), submit documentation from the Department’s [Natural Heritage Program](http://www.ncnhp.org/) demonstrating the presence or absence of threatened or endangered aquatic species within the boundary of the wastewater treatment, storage and recycle facilities.

[ ]  If the facility directly impacts such species, this documentation shall provide information on the need for permit conditions pursuant to [15A NCAC 02B .0110](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2002%20-%20environmental%20management/subchapter%20b/15a%20ncac%2002b%20.0110.pdf).

* **Wastewater Chemical Analysis** (All Application Packages treating Industrial Waste):

[ ]  Per [15A NCAC 02T .1004(f)](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2002%20-%20environmental%20management/subchapter%20t/15a%20ncac%2002t%20.1004.pdf), provide a complete Division certified laboratory chemical analysis of the effluent to be recycled for the following parameters (For new facilities, an analysis from a similar facility’s effluent is acceptable):

|  |  |  |
| --- | --- | --- |
| [ ]  Ammonia Nitrogen (NH3-N) | [ ]  Nitrate Nitrogen (NO3-N) | [ ]  Total Organic Carbon |
| [ ]  Calcium | [ ]  pH | [ ]  Total Phosphorus |
| [ ]  Chemical Oxygen Demand (COD) | [ ]  Phenol | [ ]  Total Trihalomethanes |
| [ ]  Chloride | [ ]  Sodium | [ ]  Total Volatile Organic Compounds |
| [ ]  Fecal Coliform | [ ]  Sodium Adsorption Ratio (SAR) | [ ]  Toxicity Test Parameters |
| [ ]  5-day Biochemical Oxygen Demand (BOD5) | [ ]  Total Dissolved Solids |  |
| [ ]  Magnesium | [ ]  Total Kjeldahl Nitrogen (TKN) |  |

**THE COMPLETED APPLICATION AND SUPPORTING DOCUMENTATION SHALL BE SUBMITTED TO:**

**NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY**

###### DIVISION OF WATER RESOURCES

**WATER QUALITY PERMITTING SECTION**

**NON-DISCHARGE PERMITTING UNIT**

|  |  |
| --- | --- |
| By U.S. Postal Service: | By Courier/Special Delivery: |
| 1617 Mail Service Center | [512 N. SALISBURY ST.](http://maps.google.com/maps?q=512+North+Salisbury+Street,+Raleigh,+NC&hl=en&sll=37.0625,-95.677068&sspn=33.077336,56.162109&vpsrc=0&hnear=512+N+Salisbury+St,+Raleigh,+North+Carolina+27603&t=m&z=16) |
| RALEIGH, NORTH CAROLINA 27699-1617 | [RALEIGH, NORTH CAROLINA 27604](http://maps.google.com/maps?q=512+North+Salisbury+Street,+Raleigh,+NC&hl=en&sll=37.0625,-95.677068&sspn=33.077336,56.162109&vpsrc=0&hnear=512+N+Salisbury+St,+Raleigh,+North+Carolina+27603&t=m&z=16) |
|  |  |
| TELEPHONE NUMBER: (919) 807-6464 | FAX NUMBER: (919) 807-6496 |

1. **APPLICANT INFORMATION**:
2. Applicant's name:
3. Applicant type: [ ] [ ]  Individual [ ] [ ]  Corporation [ ] [ ]  General Partnership [ ] [ ]  Privately-Owned Public Utility

[ ] [ ]  Federal [ ] [ ]  State [ ] [ ]  Municipal [ ] [ ]  County

1. Signature authority’s name:       per [15A NCAC 02T .0106(b)](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2002%20-%20environmental%20management/subchapter%20t/15a%20ncac%2002t%20.0106.pdf) Title:
2. Applicant’s mailing address:

City:       State:       Zip:      -

1. Applicant’s contact information:

 Phone number: (   )    -     Email Address:

1. **FACILITY INFORMATION:**
2. Facility name:
3. Facility status: [ ]

If this facility is existing, was it originally permitted prior to September 1, 2006? [ ] [ ]  Yes or [ ] [ ]  No

If yes, does this facility meet the criteria in [15A NCAC 02T .1003](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2002%20-%20environmental%20management/subchapter%20t/15a%20ncac%2002t%20.1003.pdf)? [ ] [ ]  Yes or [ ] [ ]  No

If yes, discontinue use of this form and complete the [Closed-Loop Recycle System Rescission Request (FORM: CLRSRR)](https://ncdenr.s3.amazonaws.com/s3fs-public/Water%20Quality/Aquifer%20Protection/LAU/CLRS/CLRSRR%2006-16.pdf)

1. Facility type:
2. Facility’s physical address:

City:       State:       Zip:      -     County:

1. Wastewater Treatment Facility Coordinates (Decimal Degrees): Latitude:   .     ○ Longitude: -  .     ○

Datum: Level of accuracy: Method of measurement:

1. USGS Map Name:
2. **CONSULTANT INFORMATION:**
3. Professional Engineer:       License Number:       Firm:

Mailing address:

City:       State:       Zip:      -

Phone number: (   )    -     Email Address:

1. Soil Scientist:       License Number:       Firm:

Mailing address:

City:       State:       Zip:      -

Phone number: (   )    -     Email Address:

1. Geologist:       License Number:       Firm:

Mailing address:

City:       State:       Zip:      -

Phone number: (   )    -     Email Address:

1. **GENERAL REQUIREMENTS –** [**15A NCAC 02T .0100**](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2002%20-%20environmental%20management/subchapter%20t/subchapter%20t%20rules.pdf)**:**
2. Application type: [ ] [ ]  New [ ] [ ]  Major Modification [ ] [ ]  Minor Modification

If a modification, provide the existing permit number: WQ00      and most recent issuance date:

1. Application fee:
2. Does this project utilize public monies or lands? [ ] [ ] [ ]  Yes or [ ] [ ]  No

If yes, was an Environmental Assessment required under [15A NCAC 01C](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2001%20-%20departmental%20rules/subchapter%20c/subchapter%20c%20rules.pdf)? [ ] [ ]  Yes or [ ] [ ]  No

If yes, which final environmental document is submitted? [ ] [ ]  Finding of No Significant Impact or [ ] [ ]  Record of Decision

Briefly describe any mitigating factors from the Environmental Assessment that may impact this facility:

1. What is the status of the following permits/certifications applicable to the subject facility?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Permit/Certification | **DateSubmitted** | **DateApproved** | **Permit/Certification Number** | **Agency Reviewer** |
| [Collection System (Q ≥ 200,000 GPD)](http://deq.nc.gov/about/divisions/water-resources/water-resources-permits/wastewater-branch/collection-systems/system-wide-collection-system-permitting) |       |       |       |       |
| [Dam Safety](http://deq.nc.gov/about/divisions/energy-mineral-land-resources/energy-mineral-land-permits/dam-safety) |       |       |       |       |
| [Erosion & Sedimentation Control Plan](http://deq.nc.gov/about/divisions/energy-mineral-land-resources/erosion-sediment-control) |       |       |       |       |
| [Nationwide 12 / Section 404](http://www.sad.usace.army.mil/regulatory/regional%20regulatory/REGIONAL%20REGULATORY%20PROGRAM.htm) |       |       |       |       |
| [Pretreatment](http://deq.nc.gov/about/divisions/water-resources/water-resources-permits/percs/pretreatment-permits) |       |       |       |       |
| [Sewer System](http://deq.nc.gov/about/divisions/water-resources/water-resources-permits/wastewater-branch/collection-systems/sewer-extension-permitting) |       |       |       |       |
| [Stormwater Management Plan](http://deq.nc.gov/about/divisions/energy-mineral-land-resources/stormwater) |       |       |       |       |
| [Wetlands 401](http://deq.nc.gov/about/divisions/water-resources/water-resources-permits/wastewater-branch/401-wetlands-buffer-permits) |       |       |       |       |
| Other:       |       |       |       |       |

1. What is the wastewater type? [ ]  Domestic or [ ] [ ]  Industrial (See [15A NCAC 02T .0103(20)](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2002%20-%20environmental%20management/subchapter%20t/15a%20ncac%2002t%20.0103.pdf))

[ ] [ ] Is there a Pretreatment Program in effect? [ ] [ ] [ ]  Yes or [ ] [ ]  No

Has a wastewater chemical analysis been submitted? [ ] [ ]  Yes or [ ] [ ]  No

1. Wastewater flow:       GPD

Limited by: [ ] [ ]  Treatment, [ ] [ ]  Storage or [ ]  Recycle Quantity

1. Explain how the wastewater flow was determined: [ ]  [15A NCAC 02T .0114](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2002%20-%20environmental%20management/subchapter%20t/15a%20ncac%2002t%20.0114.pdf) or [ ]  Representative Data

Has a flow reduction been approved under [15A NCAC 02T .0114(f)](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2002%20-%20environmental%20management/subchapter%20t/15a%20ncac%2002t%20.0114.pdf)? [ ] [ ]  Yes or [ ] [ ]  No

|  |  |  |  |
| --- | --- | --- | --- |
| **Establishment Type** | **Daily Design Flow a** | **No. of Units** | Flow |
|       |       gal/      |       |       GPD |
|       |       gal/      |       |       GPD |
|       |       gal/      |       |       GPD |
|       |       gal/      |       |       GPD |
|       |       gal/      |       |       GPD |
|       |       gal/      |       |       GPD |
| Total |       GPD |

a See [15A NCAC 02T .0114(b)](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2002%20-%20environmental%20management/subchapter%20t/15a%20ncac%2002t%20.0114.pdf), [(d)](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2002%20-%20environmental%20management/subchapter%20t/15a%20ncac%2002t%20.0114.pdf), [(e)(1)](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2002%20-%20environmental%20management/subchapter%20t/15a%20ncac%2002t%20.0114.pdf) and [(e)(2)](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2002%20-%20environmental%20management/subchapter%20t/15a%20ncac%2002t%20.0114.pdf) for caveats to wastewater design flow rates (i.e., minimum flow per dwelling; proposed unknown non-residential development uses; public access facilities located near high public use areas; and residential property located south or east of the Atlantic Intracoastal Waterway to be used as vacation rentals as defined in [G.S. 42A-4](http://www.ncleg.net/EnactedLegislation/Statutes/HTML/BySection/Chapter_42A/GS_42A-4.html)).

1. **GENERAL REQUIREMENTS –** [**15A NCAC 02T .0100**](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2002%20-%20environmental%20management/subchapter%20t/subchapter%20t%20rules.pdf) **(continued):**
2. What is the nearest 100-year flood elevation to the facility?       feet mean sea level. Source:

Are any treatment, storage or disposal facilities located within the 100-year flood plain? [ ] [ ]  Yes or [ ] [ ]  No

If yes, which facilities are affected and what measures are being taken to protect them against flooding?

 If yes, has the Applicant submitted written documentation of compliance with [§143 Article 21 Part 6](http://www.ncleg.net/enactedlegislation/statutes/pdf/byarticle/chapter_143/article_21.pdf)? [ ] [ ] [ ]  Yes or [ ] [ ]  No

1. Has the Applicant provided documentation of the presence or absence of threatened or endangered aquatic species utilizing information provided by the Department’s [Natural Heritage Program](http://www.ncnhp.org/)? [ ] [ ] [ ]  Yes or [ ] [ ]  No
2. Does the facility have a proposed or existing groundwater monitoring well network? [ ] [ ] [ ]  Yes or [ ] [ ]  No

If no, provide an explanation as to why a groundwater monitoring well network is not proposed:

If yes, complete the following table (NOTE – This table may be expanded for additional wells):

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Well Name | **Status** | Latitude a | Longitude a | **Gradient** | **Location** |
|       |  |   .     ○ | -  .     ○ |  |  |
|       |  |   .     ○ | -  .     ○ |  |  |
|       |  |   .     ○ | -  .     ○ |  |  |
|       |  |   .     ○ | -  .     ○ |  |  |
|       |  |   .     ○ | -  .     ○ |  |  |

a Provide the following latitude and longitude coordinate determination information:

Datum: Level of accuracy: Method of measurement:

1. Is the Applicant a Privately-Owned Public Utility? [ ] [ ] [ ]  Yes or [ ] [ ]  No

If yes, has the Applicant submitted a Certificate of Public Convenience and Necessity? [ ] [ ] [ ]  Yes or [ ] [ ] No

1. Demonstration of historical consideration for permit approval – [15A NCAC 02T .0120](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2002%20-%20environmental%20management/subchapter%20t/15a%20ncac%2002t%20.0120.pdf):

Has the Applicant or any parent, subsidiary or other affiliate exhibited the following?

1. Has been convicted of environmental crimes under Federal law or [G.S. 143-215.6B](http://www.ncleg.net/EnactedLegislation/Statutes/HTML/BySection/Chapter_143/GS_143-215.6B.html)? [ ] [ ] [ ]  Yes or [ ] [ ]  No
2. Has previously abandoned a wastewater treatment facility without properly closing that facility? [ ] [ ] [ ]  Yes or [ ] [ ]  No
3. Has unpaid civil penalty where all appeals have been abandoned or exhausted? [ ] [ ] [ ]  Yes or [ ] [ ]  No
4. Is non-compliant with an existing non-discharge permit, settlement agreement or order? [ ] [ ] [ ]  Yes or [ ] [ ]  No
5. Has unpaid annual fees in accordance with [15A NCAC 02T .0105(e)(2)](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2002%20-%20environmental%20management/subchapter%20t/15a%20ncac%2002t%20.0105.pdf)? [ ] [ ] [ ]  Yes or [ ] [ ]  No
6. **CLOSED-LOOP RECYCLE FACILITY DESIGN CRITERIA –** [**15A NCAC 02T .1005**](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2002%20-%20environmental%20management/subchapter%20t/15a%20ncac%2002t%20.1005.pdf)**:**
7. How does the Applicant propose to prohibit public access to the closed-loop recycle facilities?
8. Is potable water proposed to supplement the closed-loop recycle system? [ ] [ ]  Yes or [ ] [ ]  No

If yes, is there an air gap separation between the potable water system and the closed-loop recycle system? [ ] [ ]  Yes or [ ] [ ]  No

1. Can the closed-loop recycle system: [ ]  Stop production of effluent?

[ ]  Return the effluent back to the treatment facility?

[ ]  Store the effluent?

[ ]  Discharge the effluent to another permitted wastewater treatment facility?

Permit number:

[ ]  None of the above

Are essential treatment units provided in duplicate? [ ] [ ]  Yes or [ ] [ ]  No

1. If the wastewater treatment and storage systems are located within the 100-year flood plain, are there water-tight seals on all treatment/storage units or a minimum of two feet protection from the 100-year flood plain elevation? [ ] [ ]  Yes, [ ] [ ]  No,
or [ ] [ ]  N/A
2. **CLOSED-LOOP RECYCLE FACILITY DESIGN CRITERIA –** [**15A NCAC 02T .1005**](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2002%20-%20environmental%20management/subchapter%20t/15a%20ncac%2002t%20.1005.pdf) **(continued):**
3. If open atmosphere storage units are present, are they capable of containing the accumulation of water from a 25-year, 24-hour storm event? [ ]  [ ]  Yes or [ ] [ ]  No
4. If an influent pump station is part of the proposed facility (i.e., within the wastewater treatment plant boundary), does the influent pump station meet the design criteria in [15A NCAC 02T .0305(h)](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2002%20-%20environmental%20management/subchapter%20t/15a%20ncac%2002t%20.0305.pdf)? [ ] [ ]  Yes, [ ] [ ]  No, [ ] [ ]  N/A – To be permitted separately, or [ ] [ ]  N/A – Gravity fed
5. If septic tanks are part of the wastewater treatment facility, do the septic tanks adhere to the standards in [15A NCAC 18A .1900](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2018%20-%20environmental%20health/subchapter%20a/subchapter%20a%20rules.pdf)? [ ] [ ]  Yes, [ ] [ ]  No or [ ] [ ]  N/A
6. Provide the requested treatment unit and mechanical equipment information:
7. TREATMENT:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Treatment Unit | **No. of Units** | **Manufacturer or Material** | **Dimensions (ft) / Spacings (in)** | **Volume (gallons)** | **Plan Sheet Reference** | **Specification Reference** |
|       |       |       |       |       |       |       |
|       |       |       |       |       |       |       |
|       |       |       |       |       |       |       |
|       |       |       |       |       |       |       |
|       |       |       |       |       |       |       |

1. PUMPS

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Location** | **No. of Pumps** | **Purpose** | **Manufacturer / Type** | **Capacity** | **Plan Sheet Reference** | **Specification Reference** |
| **GPM** | **TDH** |
|       |       |       |       |       |       |       |       |
|       |       |       |       |       |       |       |       |
|       |       |       |       |       |       |       |       |
|       |       |       |       |       |       |       |       |

1. BLOWERS

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Location** | **No. of Blowers** | **Units Served** | **Manufacturer / Type** | **Capacity (CFM)** | **Plan Sheet Reference** | **Specification Reference** |
|       |       |       |       |       |       |       |
|       |       |       |       |       |       |       |

1. MIXERS

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Location** | **No. of Mixers** | **Units Served** | **Manufacturer / Type** | **Power(hp)** | **Plan Sheet Reference** | **Specification Reference** |
|       |       |       |       |       |       |       |
|       |       |       |       |       |       |       |

1. RECORDING DEVICES & RELIABILITY

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Device** | **No. of Units** | **Location** | **Manufacturer** | **Maximum Capacity** | **Plan Sheet Reference** | **Specification Reference** |
|       |       |       |       |       |       |       |
|       |       |       |       |       |       |       |

1. **EARTHEN STORAGE IMPOUNDMENT DESIGN CRITERIA –** [**15A NCAC 02T .1005**](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2002%20-%20environmental%20management/subchapter%20t/15a%20ncac%2002t%20.1005.pdf)**:**

IF MORE THAN ONE EARTHEN STORAGE IMPOUNDMENT, PROVIDE ADDITIONAL COPIES OF THIS PAGE AS NECESSARY.

1. What is the earthen impoundment type?
2. Storage Impoundment Coordinates (Decimal Degrees): Latitude:   .     ○ Longitude: -  .     ○

Datum: Level of accuracy: Method of measurement:

1. Do any impoundments include a discharge point (pipe, spillway, etc)? [ ] [ ] [ ]  Yes or [ ] [ ]  No
2. Are subsurface drains present beneath or around the impoundment to control groundwater elevation? [ ] [ ]  Yes or [ ] [ ]  No
3. Is the impoundment designed to receive surface runoff? [ ] [ ] [ ]  Yes or [ ] [ ]  No

If yes, what is the drainage area?       ft2, and was this runoff incorporated into the water balance? [ ] [ ]  Yes or [ ] [ ]  No

1. If a liner is present, how will it be protected from wind driven wave action?
2. Will the earthen impoundment water be placed directly into or in contact with GA classified groundwater? [ ] [ ]  Yes or [ ] [ ]  No

If yes, has the Applicant provided predictive calculations or modeling demonstrating that such placement will not result in a contravention of GA groundwater standards? [ ] [ ]  Yes or [ ] [ ]  No

1. What is the depth to bedrock from the earthen impoundment bottom elevation?       ft

If the depth to bedrock is less than four feet, has the Applicant provided a liner with a hydraulic conductivity no greater than 1 x 10-7 cm/s? [ ] [ ]  Yes, [ ] [ ]  No or [ ]  N/A

Has the Applicant provided predictive calculations or modeling demonstrating that surface water or groundwater standards will not be contravened? [ ] [ ]  Yes or [ ] [ ]  No

If the earthen impoundment is excavated into bedrock, has the Applicant provided predictive calculations or modeling demonstrating that surface water or groundwater standards will not be contravened? [ ] [ ]  Yes, [ ] [ ]  No or [ ] [ ]  N/A

1. If the earthen impoundment is lined and the mean seasonal high water table is higher than the impoundment bottom elevation, how will the liner be protected (e.g., bubbling, groundwater infiltration, etc.)?
2. If applicable, provide the specification page references for the liner installation and testing requirements:
3. If the earthen impoundment is located within the 100-year flood plain, has a minimum of two feet of protection (i.e., top of embankment elevation to 100-year flood plain elevation) been provided? [ ] [ ]  Yes or [ ] [ ]  No
4. Provide the requested earthen impoundment design elements and dimensions:

|  |  |
| --- | --- |
| **Earthen Impoundment Design Elements** | **Earthen Impoundment Dimensions** |
| Liner type: | [ ]  Clay | [ ]  Synthetic | Top of embankment elevation: |       ft |
| [ ]  Other | [ ]  Unlined |
| Liner hydraulic conductivity: |       x       - cm/s | Freeboard elevation: |       ft |
| Hazard class: |  | Toe of slope elevation:  |       ft |
| Designed freeboard: |       ft | Impoundment bottom elevation:  |       ft |
| Total volume: |       ft3 |       gallons | Mean seasonal high water table depth:  |       ft |
| Effective volume: |       ft3 |       gallons | Embankment slope: |       :       |
| Effective storage time: |       days | Top of dam water surface area: |       ft2 |
| Plan Sheet Reference: |       | Freeboard elevation water surface area: |       ft2 |
| Specification Section: |       | Bottom of impoundment surface area: |       ft2 |

NOTE – The effective volume shall be the volume between the two foot freeboard elevation and the: (1) pump intake pipe elevation; (2) impoundment bottom elevation or (3) mean seasonal high water table, whichever is closest to the two foot freeboard elevation.

1. **SETBACKS –** [**15A NCAC 02T .1006**](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2002%20-%20environmental%20management/subchapter%20t/15a%20ncac%2002t%20.1006.pdf)**:**
2. Does the project comply with all setbacks found in the river basin rules ([15A NCAC 02B .0200](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2002%20-%20environmental%20management/subchapter%20b/subchapter%20b%20rules.pdf))? [ ] [ ]  Yes or [ ] [ ]  No

If no, list non-compliant setbacks:

1. Have any setback waivers been obtained in order to comply with [15A NCAC 02T .1006](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2002%20-%20environmental%20management/subchapter%20t/15a%20ncac%2002t%20.1006.pdf)? [ ] [ ]  Yes or [ ] [ ]  No

If yes, have these waivers been written, notarized and signed by all parties involved and recorded with the County Register of Deeds? [ ] [ ]  Yes or [ ] [ ]  No

1. Provide the minimum field observed distances (ft) for each setback parameter to the disposal system and treatment/storage units (NOTE: Distances greater than 500 feet may be marked N/A):

|  |  |
| --- | --- |
| **Setback Parameter** | Treatment / Storage Units |
| Any habitable residence or place of assembly under separate ownership or not to be maintained as part of the project site |       |
| Any private or public water supply source |       |
| Surface waters (streams – intermittent and perennial, perennial waterbodies, and wetlands) |       |
| Any well with exception of monitoring wells |       |
| Any property line |       |

**Professional Engineer's Certification:**

I, attest that this application for

(Professional Engineer’s name from Application Item III.1.)

(Facility name from Application Item II.1.)

has been reviewed by me and is accurate, complete and consistent with the information supplied in the plans, specifications, engineering calculations, and all other supporting documentation to the best of my knowledge. I further attest that to the best of my knowledge the proposed design has been prepared in accordance with this application package and its instructions, as well as all applicable regulations and statutes. Although other professionals may have developed certain portions of this submittal package, inclusion of these materials under my signature and seal signifies that I have reviewed this material and have judged it to be consistent with the proposed design.

**NOTE** – In accordance with General Statutes [143-215.6A](http://www.ncleg.net/EnactedLegislation/Statutes/HTML/BySection/Chapter_143/GS_143-215.6A.html) and [143-215.6B](http://www.ncleg.net/EnactedLegislation/Statutes/HTML/BySection/Chapter_143/GS_143-215.6B.html), any person who knowingly makes any false statement, representation, or certification in any application package shall be guilty of a Class 2 misdemeanor, which may include a fine not to exceed $10,000, as well as civil penalties up to $25,000 per violation.

North Carolina Professional Engineer's seal, signature, and date:

**Applicant's Certification per** [**15A NCAC 02T .0106(b)**](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2002%20-%20environmental%20management/subchapter%20t/15a%20ncac%2002t%20.0106.pdf)**:**

I, attest that this application for

(Signature Authority’s name & title from Application Item I.3.)

(Facility name from Application Item II.1.)

has been reviewed by me and is accurate and complete to the best of my knowledge. I understand that any discharge of wastewater from this non-discharge system to surface waters or the land will result in an immediate enforcement action that may include civil penalties, injunctive relief, and/or criminal prosecution. I will make no claim against the Division of Water Resources should a condition of this permit be violated. I also understand that if all required parts of this application package are not completed and that if all required supporting information and attachments are not included, this application package will be returned to me as incomplete. I further certify that the Applicant or any affiliate has not been convicted of an environmental crime, has not abandoned a wastewater facility without proper closure, does not have an outstanding civil penalty where all appeals have been exhausted or abandoned, are compliant with any active compliance schedule, and do not have any overdue annual fees per [15A NCAC 02T .0105(e)](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2002%20-%20environmental%20management/subchapter%20t/15a%20ncac%2002t%20.0105.pdf).

**NOTE** – In accordance with General Statutes [143-215.6A](http://www.ncleg.net/EnactedLegislation/Statutes/HTML/BySection/Chapter_143/GS_143-215.6A.html) and [143-215.6B](http://www.ncleg.net/EnactedLegislation/Statutes/HTML/BySection/Chapter_143/GS_143-215.6B.html), any person who knowingly makes any false statement, representation, or certification in any application package shall be guilty of a Class 2 misdemeanor, which may include a fine not to exceed $10,000 as well as civil penalties up to $25,000 per violation.

Signature: Date: