**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 additional information requested. Failure to submit all of the required items will lead to additional processing and review time for the permit application. Unless otherwise noted, the Applicant shall submit one original and two copies of the application and supporting documentation**

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

#### 

#### General – This application is for treatment, storage, transport, and/or land application of Class B residuals (may include residuals that are generated from a water treatment plant or other type facilities) on the proposed or currently approved land application site(s) under [15A NCAC 02T .1100](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2002%20-%20environmental%20management/subchapter%20t/15a%20ncac%2002t%20.0110.pdf).

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

1. **Residuals Land Application Program (FORM: RLAP 06-16) Application**: (All Application Packages):

Submit the completed and appropriately executed Residuals Land Application Program (FORM: RLAP 06-16) form. Please do not make any unauthorized content changes to this form. 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.

The Applicant’s Certification on Page 5 of this form 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). 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 modification of an existing permit, submit one copy of the existing permit.

Please submit this application form at least 180 days prior to the expiration date on the existing permit, or 90 days prior to operation of proposed facility(ies) for application packages involving new or changes to treatment and storage units.

1. **Application Fee** (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).

| **Facility Classification** | **New Permit** | **Major Modification 1** |
| --- | --- | --- |
| Major (land are permitted for ≥ 300 acres) | $1,310 | $395 |
| Minor (land are permitted for < 300 acres) | $810 | $245 |

1 - A major modification shall be defined as any permit modification that: increases the generating facility’s residuals dry tonnage; adds additional land application areas not previously approved for that particular program [including transferring of field(s) from one program to another]; adds additional residuals sources; or includes the addition of new treatment or storage units/processes not previously permitted. There is no fee for minor modifications to a permit.

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. **Environmental Assessments** (May be Required – See [15A NCAC 1C .0300](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2001%20-%20departmental%20rules/subchapter%20c/subchapter%20c%20rules.pdf))

Submit a copy of the Findings of No Significant Impact (FONSI) or Environmental Impact Statement (EIS). Also, include information on any mitigating factor(s) from the Environmental Assessment (EA) that impact the construction of the residuals treatment and storage facilities. An EA may also be required for private systems if any public funds and/or lands are used for the construction of the subject facilities.

1. **Operation and Maintenance Plan** (New and Renewal Application Packages)

For Modification Application, if there are any changes to the existing plan, submit an updated O&M plan.

Submit the O&M Plan in accordance with [15A NCAC 02T .1110](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2002%20-%20environmental%20management/subchapter%20t/15a%20ncac%2002t%20.0110.pdf) and include at a minimum:

Operational functions; describe the operation of the program to show what operations are necessary for the program to function and by whom the functions are to be conducted.

Maintenance schedules; may include equipment calibration, maintenance of signs, etc.

Safety measures; may include safety training program, manuals, signs, etc.

Spill response plan; including control, containment, remediation, emergency contact information, etc.

Inspection plan including the following information;

Names and titles of personnel responsible for conducting the inspections.

Frequency and location of inspections, including those to be conducted by the ORC, and procedures to assure that the selected location(s) and inspection frequency are representative of the residuals management program.

Detailed description of inspection procedures including record keeping and actions to be taken by the inspector in the event that noncompliance is observed.

Sampling and monitoring plan including the following information;

Names and titles of personnel responsible for conducting the sampling and monitoring.

Detailed description of monitoring procedures including parameters to be monitored.

Sampling frequency and procedures to assure that representative samples are being collected. Fluctuation in temperature, flow, and other operating conditions can affect the quality of the residuals gathered during a particular sampling event. The sampling plan shall account for any foreseen fluctuations in residuals quality and indicate the most limiting times for residuals to meet pathogen and vector attraction reduction requirements (e.g. facilities that land apply multiple times per year but have an annual sampling frequency, may need to sample during winter months when pathogen reduction is most likely to be negatively affected by cold temperatures.

**THE FOLLOWING ADDITIONAL ITEMS (G to M) ARE REQUIRED FOR DEDICATED PROGRAM ONLY.**

1. **Program Determination**

Dedicated residuals land application programs are ones in which land application sites meet the criteria in [15A NCAC 02T .1102(12)](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2002%20-%20environmental%20management/subchapter%20t/15a%20ncac%2002t%20.1102.pdf). Specifically, a residuals land application program is designated as dedicated if any of the following are applicable:

Any land application site certified for the residuals land application program that receives residuals at rates or frequencies greater than agronomic rates.

Any land application site certified for the residuals land application program that is used primarily for residuals disposal, and agricultural crop production is of secondary importance.

Any land application site certified for the residuals land application program that receives residuals through fixed irrigation facilities or irrigation facilities fed through a fixed supply system.

Please contact the Non-Discharge Permitting Unit if you need any assistance in determining whether your residuals program falls under the dedicated program definitions.

1. **Program Information**

Provide an explanation of why a dedicated system is required instead of a conventional non-dedicated system.

Provide an explanation of the dedicated system and its operation.

1. **Detailed** **Site Maps** (All New or Modification Application Packages)

Submit three (3) sets of standard size plans and two (2) sets of 11" by 17" plans (electronic format is acceptable - Adobe PDF only). For Modifications, submit plans specific to the modification(s) only.

Plans must include the following minimum items:

A general location map, a vicinity map and a topographic map with contours not exceeding 10 feet or 25% of the total site relief and showing all facility related structures and fences within the land application area.

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 the land application site(s).

Delineation of the review and compliance boundaries

Setbacks as required by 15A NCAC 02T .1108

Site property boundaries within 500 feet of all waste treatment, storage, and disposal site(s).

A map showing the entire irrigation area with an overlay of the suitable irrigation area depicted by the soil scientist’s evaluation. The irrigation plans shall show each nozzle/emitter and wetted area (when applicable). Clearly label spray irrigation zones as they will be operated.

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

1. **Project Evaluation and Receiver Site Management Plan** (All New Application Packages or Modifications that include new sites)

Submit a project evaluation and a receiver site management plan (if applicable) with recommendations concerning cover crops and their ability to accept the proposed application rates.

1. **Hydrogeologic Report** (All New Application Packages or Modifications involving increasing the total design capacity)

Submit a detailed hydrogeologic evaluation in accordance with [15A NCAC 02T .1104(d)(4)](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2002%20-%20environmental%20management/subchapter%20t/15a%20ncac%2002t%20.1104.pdf) and current Division Policy available at: <http://www.ncwater.org/Rules_Policies_and_Regulations/>. The document shall be signed, sealed and dated by a qualified professional.

1. **Engineering Design Documents** (All New or Modification Application Packages with fixed irrigation facilities or irrigation facilities fed through fixed supply system)

Submit engineering design documents that have been signed, sealed, and dated by a NC licensed Professional Engineer and/or Professional Land Surveyor in accordance with [15A NCAC 02T .1104(d)(2)](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2002%20-%20environmental%20management/subchapter%20t/15a%20ncac%2002t%20.1104.pdf). For Modifications, submit an updated site map specific to the modification(s) only.

The design documents must include the following minimum items:

Engineering plans for the facility and equipment except those previously permitted unless they are directly tied into the new units or are critical to the understanding of the complete process;

Specifications describing materials to be used, method of construction, and means for ensuring quality and integrity of the finished product including leaking testing; and

Engineering calculations including hydraulic and pollutant loading, sizing criteria, hydraulic profile, total dynamic head curve analysis for each pump, and irrigation design.

Soil mapping units shown on all disposal sites.

1. **Water Balance** (All New Application Packages or Modifications that include new sites utilizing fixed irrigation facilities or irrigation facilities fed through fixed supply systems)

Submit a completed and accurate water balance in accordance with [15A NCAC 02T .1104(d)(5)](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2002%20-%20environmental%20management/subchapter%20t/15a%20ncac%2002t%20.1104.pdf) and current Division Policy available at: <http://www.ncwater.org/Rules_Policies_and_Regulations/>.

1. **Property Ownership Documentation** (All New or Modification Application Packages involving new and/or relocated treatment or irrigation components)

Property ownership documentation shall consist of one of the following:

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

An easement running with the land specifically indicating the intended use of the property and meeting the requirements of [15A NCAC 02L .0107(f)](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), or

A written notarized lease agreement signed by both parties, indicating the intended use of the property, as well as a plat or survey map.

**ONE ORIGINAL AND TWO COPIES OF THE COMPLETED APPLICATION PACKAGE, INCLUDING ALL SUPPORTING INFORMATION AND MATERIALS, SHALL BE SENT TO THE FOLLOWING ADDRESS:**

**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 street |
| RALEIGH, NORTH CAROLINA 27699-1617 | RALEIGH, NORTH CAROLINA 27604 |
|  |  |
| TELEPHONE NUMBER: (919) 807-6464 | FAX NUMBER: (919) 807-6496 |

**I.** **APPLICANT INFORMATION**:

1. Applicant's name:

Applicant type:  Individual  Corporation  General Partnership  Privately-Owned Public Utility

Federal  State  Municipal  County

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

Applicant’s mailing address:

City:       State:       Zip:      -

Telephone number: (   )    -     Email Address:

1. Consultant’s name:       License Number (for P.E.):

Affiliation:  On Staff  Retained (Firm:      )

Consultant’s mailing address:

City:       State:       Zip:      -

Telephone number: (   )    -     Email Address:

1. Agronomist’s name:       License Number:

Affiliation:  N/A  On Staff  Retained (Firm:      )

Agronomist’s mailing address:

City:       State:       Zip:      -

Telephone number: (   )    -     Email Address:

1. Soil Scientist’s name:       License Number:

Affiliation:  N/A  On Staff  Retained (Firm:      )

Soil Scientist’s mailing address:

City:       State:       Zip:      -

Telephone number: (   )    -     Email Address:

1. Fee submitted:       (**See Instruction B**)

**II. PERMIT INFORMATION**:

1. Application is for (check all that apply):  new,  modified,  renewed permit
2. If this application is being submitted to renew or modify an existing permit, provide the following:

Permit number:

Date of most-recently issued permit:

Date of most-recently certified Attachment A (if different than the permit):

Date of most-recently certified Attachment B (if different than the permit):

* + 1. **RESIDUALS LAND APPLICATION PROGRAM INFORMATION**:

1. Residuals Processing Facility’s physical address:

City:       State:       Zip:      -

Coordinates: Latitude:   ○   ′   ″ Longitude:   ○   ′   ″

Datum:       Level of accuracy:

Method of measurement:

1. County where residuals land application program is headquartered:
2. List the Operator In Responsible Charge (ORC) and all Back-Up ORCs for the residuals land application program, their certification numbers, and their affiliations in the following table:

|  |  |  |  |
| --- | --- | --- | --- |
| Designation | **Name** | **Affiliation** | Certification Number |
| ORC |  |  |  |
| Back-Up ORC |  |  |  |
| Additional Back-Up ORCs  (if applicable) |  |  |  |

If an ORC and at least one Back-Up ORC are not currently designated for this residuals land application program, provide the candidates’ names, affiliations, and an estimated time schedule for each candidate’s completion of the required training school and certification test:

1. Complete the following tables regarding management of the residuals land application program:
2. ***Plant Available Nitrogen Summary:*** Determine the maximum plant available nitrogen (PAN) generated by all residuals source-generating facilities as currently certified and proposed for certification with this application and list the results in the following table:

**Maximum amount of residuals to be certified:**       **dry tons per year.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| PAN | Pounds of PAN per Dry Ton  *(Weighted Average)* | | Pounds of PAN per Year | |
|  | Surface | **Incorporation or Injection** | Surface | **Incorporation or Injection** |
| First-Year |  |  |  |  |
| Five-Year Maximum Adjusted |  |  |  |  |

1. ***Land Application Site Use Summary*:** Summarize information regarding the land application sites as currently certified and proposed for certification with this application:

|  |  |  |  |
| --- | --- | --- | --- |
| **Category** | **Use** | **Acres** | **Comments** |
| Crops | Forest or Plantation |  |  |
|  | Row Crops |  |  |
|  | Hay |  |  |
|  | Pasture |  |  |
|  | Total: |  |  |
| Methods | Surface |  |  |
|  | Incorporation or Injection |  |  |
|  | Total: |  |  |

1. ***Residuals Land Application Summary*:** Determine the minimum acreage required to land apply the residuals as currently certified and proposed for certification assuming the scenarios listed in the following table:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Assumed Application Rate *(lbs PAN/ac-yr)* | Acres Required Using **First-Year PAN Concentrations** | | Acres Required Using **Five-Year Maximum Adjusted PAN Concentrations** | |
|  | Surface | **Incorporation or Injection** | Surface | **Incorporation or Injection** |
| 50 |  |  |  |  |
| 100 |  |  |  |  |
| 150 |  |  |  |  |
| 200 |  |  |  |  |

1. If applicable, provide a plan and a schedule to resolve any known issues that would prevent land application of the proposed residuals due to the violation of North Carolina Administrative Code (e.g. not enough storage, not enough land, vector reduction practices not in place, etc.):
2. Specify type of residuals program **(See Instruction F)**:  Non-dedicated  Dedicated

If Dedicated, specify the following (check all that apply):

Residuals program contains any land application site(s) that receives residuals at rates or frequencies greater than agronomic rates, explain;

Residuals program contains any land application site(s) that is used primarily for residuals disposal, and agricultural crop production is of secondary importance, explain;

Residuals program contains any land application site(s) that receives residuals through fixed irrigation facilities or irrigation facilities fed through a fixed supply system, explain;

* + 1. **RESIDUALS SOURCE INFORMATION:** (Required for all new, renewed, or modified residuals source)

Complete and submit the following *Residuals Source Certification* and all associated documentation.



* + 1. **LAND APPLICATION SITE INFORMATION:** (Required for all new, renewed, or modified land application site)

Complete and submit the following *Land Applications Site Certification* and all associated documentation.

# Note: Item VI. Applicable to Dedicated Program with fixed irrigation system only.

# DESIGN INFORMATION FOR FIXED IRRIGATION SYSTEM

1. The irrigation system is:  Spray  Drip
2. Disposal system is:  existing  proposed.
3. Minimum depth to mean seasonal high water table (SHWT) within irrigation sites(s) per Soil Scientist's Evaluation:       feet below ground surface. Rules [15A NCAC 02T .0505(p)](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2002%20-%20environmental%20management/subchapter%20t/15a%20ncac%2002t%20.0505.pdf) requires at least one-foot vertical separation between SHWT and ground surface.
4. Are there any artificial drainage or water movement structures within 200 feet of any irrigation area?

Yes or   No If Yes, please explain if the soil scientist report addresses artificial structures and please indicate if structures are to be maintained or modified:

1. Loading rates recommended by the Soil Scientist Evaluation:

|  |  |  |  |
| --- | --- | --- | --- |
| **Soil Series** | **Fields within Soil Area** | **Recommended Loading Rate**  **(in/hr)** | **Recommended Loading Rate**  **(in/yr)** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

1. Design loading rates are equal or less than the loading rates recommended by Soil Scientist?

Yes or  No If No, explain why [15A NCAC 02T .0505(n)](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2002%20-%20environmental%20management/subchapter%20t/15a%20ncac%2002t%20.0505.pdf) is not met:

1. Non-dedicated System Design (fill in the appropriate information for either a spray or drip irrigation system):

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Field / Zone | Design Area (ft2) | Number of Nozzles | Maximum Application Rate (gallons/hr) | Design Annual Loading Rate (gallons/yr) |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| *Total* |  |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Spray Irrigation Design Element** |  | **Plan Sheet Number** | **Specification Page Number** |
| Wetted diameter of nozzles | ft |  |  |
| Wetted area of nozzles | ft2 |  |  |
| Nozzle capacity | gpm |  |  |
| Nozzle manufacturer / model | / |  |  |
| Elevation of highest nozzle | ft |  |  |

**Applicant's Certification (signing authority must be in compliance with** [**15A NCAC 02T .0106**](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)**):**

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 under Rule [15A NCAC 02T .0105](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  No, Explain;

I,

(Signature Authority’s Name – PLEASE PRINT) (Title)

attest that this application for

(Facility Name)

has been reviewed by me and is accurate and complete to the best of my knowledge. I understand that the Division of Water Resources may not conduct a technical review of this program and approval does not constitute a variance to any rules or statutes unless specifically granted in the permit. Further, any discharge of residuals to surface waters or the land will result in an immediate enforcement action, which 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 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.

**Note**: In accordance with North Carolina General Statutes §143-215.6A and §143-215.6B, any person who knowingly makes any false statement, representation, or certification in any application 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: