**Groundwater Application Submission Checklist**

The Application Submission Checklist should be completed in its entirety and included on the Cover Sheet of all applications submitted to the Department. **DEQ will consider your submission incomplete if you do not provide an answer (or indicate “N/A” or “not applicable”) for all fields on the checklist.**

**Date of Pre-Application Meeting:**

1. **APPLICATION TYPE**

[ ]  Existing Withdrawal, Not Previously Permitted

[ ]  New Withdrawal

[ ]  Expanded Withdrawal DEQ Permit #:

[ ]  Modification DEQ Permit #:

[ ]  Reapplication With Changes DEQ Permit #:

[ ]  Reapplication Without Changes DEQ Permit #:

1. **BENEFICIAL USE**

[ ]  Domestic (public or private water supply)

[ ]  Agricultural (crop irrigation, livestock)

[ ]  Commercial or Industrial

[ ]  Surface Water and Groundwater Conjunctive Use

1. **AGENT/CONSULTANT INFORMATION**

Company Name:

Contact Name:

Mailing Address:

City: State: Zip:

Telephone Number:

Email Address:

1. **OWNER INFORMATION**

Owner:

FIN:

Owner Address:

City: State: Zip:

Telephone Number:

Email Address:

1. **FACILITY INFORMATION**

Facility/System Name:

Contact Name:

Facility 911 Address:

City: State: Zip:

Telephone Number:

Email Address:

1. **GENERAL INFORMATION** [provide the application page number where information is located]

| **General Facility and Beneficial Use Information** | **Page Number(s)** |
| --- | --- |
| 1. Description of facility’s activity
 |  |
| 1. Description of all beneficial uses at the facility
 |  |
| 1. Description of water system
 |  |
| 1. Description of water system wells
 |  |
| 1. Description of water system uses and operations
 |  |

| **General Map Information** | **Page Number(s)** |
| --- | --- |
| 1. United States Geological Survey 7.5-minute topographic map
 |  |
| 1. Quadrangle Name
 |  |
| 1. Map Scale
 |  |
| 1. North arrow
 |  |
| 1. Location of all wells (existing, proposed, abandoned, out of service)
 |  |
| 1. Location of the facility property boundaries
 |  |
| 1. Location of water supply service area associated with the application
 |  |
| 1. Detailed maps of the well location(s) if needed due to scale of topo map
 |  |

This portion of the application submittal may be waived at the pre-application meeting if there are no planned modifications to the system including new wells and satisfactory maps and drawings are on file with the Department. Check the boxes below as appropriate if this information was waived at the pre-application meeting.

[ ]  Requirement for United States Geological Survey map waived by DEQ at pre-application meeting.

[ ]  Requirement for detailed well location map waived by DEQ at pre-application meeting.

1. **GEOTECHNICAL INFORMATION**

| **General Existing Well Information** | **Page Number(s)** |
| --- | --- |
| 1. Complete and attach Existing Well Information Worksheet for all wells located at the facility
 |  |
| 1. Attach water well completion reports including documentation of abandoned wells, if available (i.e., GW-2 form; GW-5 form)
 |  |
| 1. Attach geophysical logs, if available or required by DEQ after pre-application meeting
 |  |
| 1. Attach driller’s logs, if available
 |  |
| 1. Attach aquifer testing, if available or required during by DEQ pre-application meeting
 |  |
| 1. Provide pump settings with source documentation
 |  |
| **If Items 2-6 are not available, provide the information below:** |  |
| 1. Description of any apparent gravel packing/other construction concerns
 |  |
| 1. Include camera survey if needed to document well screens/depths
 |  |
| 1. Description of well screening across multiple aquifers, if applicable
 |  |
| 10. Description of any known septic fields or abandoned wells, if applicable |  |

**For re-applications**, check the box below if the pump intake depths have not changed since issuance of the previous permit. If the pump intake depth has changed, then the complete information for that well should be submitted with the current pump intake depth.

[ ]  Requirement for well construction information waived by DEQ at pre-application meeting. Note: Completion of the Existing Well Worksheet is still required even if this box is checked (See #1 in General Existing Well Information table above.)

[ ]  Pump intakes have not changed since previous permit issuance.

| **General Proposed Well Information** | **Page Number(s)** |
| --- | --- |
| 1. Complete and attach Proposed Well Information Worksheet for all wells associated with the application
 |  |
| 1. Statement of intent to use groundwater as part of a Surface and Groundwater Conjunctive Use system, if applicable
 |  |
| 1. Statement of intent to use groundwater for supplemental drought relief
 |  |
| 1. Statement of intent to install a new well prior to permit issuance and/or during upcoming permit period
 |  |

1. **REQUESTED WITHDRAWAL AMOUNT**

Max. Gallons per year:

Max. Gallons per month:

Are withdrawal amounts seasonal or variable throughout the calendar year? [ ]  Yes [ ]  No

If yes checked above, projected maximum gallons to be withdrawn within a 15-year period:

1. **WITHDRAWAL JUSTIFICATION**

| **For All Users** | **Page Number(s)** |
| --- | --- |
| 1. Description of historic withdrawal amounts for the previous permit term
 |  |
| 1. Description of significant past leaks
 |  |
| 1. Description of changes in the system
 |  |
| 1. Line drawing of the system
 |  |
| 1. Apportionment of the withdrawal to individual wells
 |  |
| 1. Text and mathematical calculations to describe the justification and need for the requested withdrawal amount
 |  |

**DIRECTIONS FOR TABLES BELOW:**

Fill out items for your justification type and then proceed to Section J:

**Public Water Supply** – Fill out items 7 through 17

**Agriculture** – Fill out items 18 through 22

**Commercial** – Fill out items 23-28

**Industrial** – Fill out items 29-35

**Conjunctive Use Withdrawal for Public Water Supply** – Fill out items 36-43

**Conjunctive Use for Withdrawals other than Public Water Supply** – Fill out items 44-53

**Supplemental Drought Wells** – Fill out times 54-57

| **Public Water Supply Withdrawal Justification** | **Page Number(s)** |
| --- | --- |
| 1. Historic withdrawal data for the previous permit term
 |  |
| 1. Description of existing water supply sources and yields
 |  |
| 1. Description of existing water supply demands
 |  |
| 1. Description of changes in water needs (15-year projected demand)
 |  |
| 1. Current peak day and average daily withdrawal
 |  |
| 1. Total amount of withdrawal needed for human consumption
 |  |
| 1. Description of types of water uses
 |  |
| 1. Description of existing water conservation measures
 |  |
| 1. Description of existing drought response plan
 |  |
| 1. Description of projected demand in 10-year increments over min. 30-year planning period that includes (5-year increments preferred):
 |  |
| 1. Projected demand contained in the local or regional water supply plan developed in accordance with [9VAC25-780](https://law.lis.virginia.gov/admincode/title9/agency25/chapter780/) or for the project service area if such area is smaller than the planning area
 |  |
| 1. Statistical population growth trends, projected demands by use type including projected demand with and without water conservation measures
 |  |
| 1. Copy of VDH Water Works Operation Permit & Engineering Description Sheets (find all)
 |  |

Did you supply both written rationale and mathematical calculations showing how the requested annual and monthly withdrawal limits were derived? [ ]  Yes [ ]  No

**If No, your application will be considered incomplete.**

| **Agricultural Water Supply Withdrawal Justification** | **Page Number(s)** |
| --- | --- |
| 1. Historic withdrawal data for previous permit term
 |  |
| 1. Description of changes in water needs
 |  |
| 1. Description of crop irrigation, if applicable and including:

Crop type, Crop acreage, Crop spacing, Crop water requirements (crop rooting depth), Soil types with holding capacity and allowable water depletion, Historic precipitation records, Peak irrigation months, Irrigation scheduling approaches (tensiometers vs feel method), Irrigation type (drip, overhead, center pivot, etc.), Irrigation system efficiency rating |  |
| 1. Description of livestock watering, if applicable and including:

Kind and size of animal, Rate and composition of gain, Presence of pregnant animals and lactating animals, Type of diet, Level of dry matter intake, Level of activity, Quality of water offered, Temperature of water offered, Surrounding air temperature |  |
| 1. Requested 15-year limit amount
 |  |

Did you supply both written rationale and mathematical calculations showing how the requested lump sum term limit (if applicable), annual, and monthly withdrawal limits were derived? [ ]  Yes [ ]  No

**If No, your application will be considered incomplete.**

| **Commercial Water Supply Withdrawal Justification** | **Page Number(s)** |
| --- | --- |
| 1. Historic withdrawal data for previous permit term
 |  |
| 1. Description of changes in water needs
 |  |
| 25. Number of employees by month for an average year |  |
| 26. Average gallons used per day per month |  |
| 27. Average daily water use rate per employee per month |  |
| 28. Identification of peak month of water demand |  |

Did you supply both written rationale and mathematical calculations showing how the requested annual and monthly withdrawal limits were derived? [ ]  Yes [ ]  No

**If No, your application will be considered incomplete.**

| **Industrial Water Supply Withdrawal Justification** | **Page Number(s)** |
| --- | --- |
| 29. Historic withdrawal data for previous permit term |  |
| 30. SIC or NAICS industry code |  |
| 31. Number of employees by month for an average year |  |
| 32. Average daily water use rate per employee per month |  |
| 33. Identification of peak month of water demand |  |
| 34. Amount of withdrawal per unit of output, or similar metric identified by the user |  |
| 35. Monthly amount of water used for industrial processes |  |

Did you supply both written rationale and mathematical calculations showing how the requested annual and monthly withdrawal limits were derived? [ ]  Yes [ ]  No

**If No, your application will be considered incomplete.**

| **Conjunctive Use Withdrawal Justification for Public Water Supplies** | **Page Number(s)** |
| --- | --- |
| 1. Identification of all surface water sources including pond and reservoir volumes where applicable
 |  |
| 1. Identification of wells used on a continual basis
 |  |
| 1. Identification of wells to be utilized in periods of reduced surface water availability
 |  |
| 1. Well construction information for all wells submitted on a GW-2 form including:
 |  |
| 1. The depth of the well
 |  |
| 1. The diameter, top and bottom, and material of each cased interval
 |  |
| 1. The diameter, top and bottom, for each screened interval
 |  |
| 1. The depth of pump intake
 |  |
| 1. A description of the storage system, excluding surface water sources described in #36 above
 |  |
| 1. A copy of the Engineering Description Sheet developed by VDH for the withdrawal
 |  |
| 1. A line drawing of the water supply system illustrating the water balance of the system
 |  |
| 1. Records documenting withdrawal amounts on a daily basis for each water source during average conditions
 |  |
| 1. Documentation of seasonal supply of surface water during average conditions
 |  |
| 1. Documentation of seasonal changes in demand during an annual cycle of beneficial use(s)
 |  |
| 1. Demonstration that the groundwater withdrawal will originate from the aquifer that contains the lowest quality water that will support the beneficial use(s)
 |  |

Did you supply both written rationale and mathematical calculations showing how the requested annual and monthly withdrawal limits were derived? [ ]  Yes [ ]  No

**If No, your application will be considered incomplete.**

| **Conjunctive Use Withdrawal Justification for Uses Other than Public Water Supply** | **Page Number(s)** |
| --- | --- |
| 1. Identification of all surface water sources, including pond and reservoir volumes where applicable
 |  |
| 1. Identification of wells used on a continual basis
 |  |
| 1. Identification of wells to be utilized in periods of reduced surface water availability
 |  |
| 1. Well construction information for all wells submitted on a GW-2 form including:
 |  |
| 1. The depth of the well
 |  |
| 1. The diameter, top and bottom, and material of each cased interval
 |  |
| 1. The diameter, top and bottom, of each screened interval
 |  |
| 1. The depth of pump intake
 |  |
| 1. A description of the storage system, excluding surface water sources described in #49 above
 |  |
| 1. A map delineating the area in which the water will be beneficially used
 |  |
| 1. Records documenting the amount of water withdrawn monthly for each water source during average conditions
 |  |
| 1. Records documenting the amount of water withdrawn on a yearly basis for each water source during average conditions
 |  |
| 1. Documentation of seasonal changes in demand that occur during an annual cycle of the specified beneficial use(s)
 |  |
| 1. Demonstration that the groundwater withdrawal will originate from the aquifer that contains the lowest quality water that will support the beneficial use(s)
 |  |

Did you supply both written rationale and mathematical calculations showing how the requested lump sum term limit (if applicable), annual, and monthly withdrawal limits were derived? [ ]  Yes [ ]  No

**If No, your application will be considered incomplete.**

| **Supplemental Drought Wells Withdrawal Justification** | **Page Number(s)** |
| --- | --- |
| 1. **For public water supply** - Records documenting withdrawal amounts daily for each water source during drought conditions
 |  |
| 1. **For public water supply** - Documentation of seasonal supply of surface water during drought conditions
 |  |
| 1. **Uses other than public water supply** - Records documenting the amount of water withdrawn monthly for each water source during drought conditions
 |  |
| 1. **Uses other than public water supply** - Records documenting the amount of water withdrawn on a yearly basis for each water source during drought conditions
 |  |

Did you supply both written rationale and mathematical calculations showing how the requested annual and monthly withdrawal limits were derived? [ ]  Yes [ ]  No

**If No, your application will be considered incomplete.**

1. **ALTERNATIVES ANALYSIS (see** [**9VAC25-610-102**](https://law.lis.virginia.gov/admincode/title9/agency25/chapter610/section102/)**)**

| **For All Withdrawals** | **Page Number(s)** |
| --- | --- |
| 1. Provide an alternatives analysis that evaluates sources of water supply other than groundwater
 |  |
| 1. Evaluate the availability and use of lower qualities of groundwater that can still be put to beneficial use including the surficial aquifer
 |  |
| 1. Identify opportunities to reduce and minimize the use of groundwater
 |  |
| 1. Demonstrate that the project utilizes the lowest quality water for the proposed activity
 |  |
| 1. Demonstrate that alternative sources, including surface water and reuse, were considered
 |  |
| 1. Demonstrate that practicable alternatives, including design alternatives, have been evaluated
 |  |
| 1. Demonstrate that the proposed alternative meets the project purpose and project demonstrated need
 |  |
| 1. Discuss the availability of the alternative
 |  |
| 1. Evaluate the interconnectivity of the water supply system and the ability to purchase water from other supplies when applicable
 |  |

Did you provide the costs associated with the use of alternative source(s)? [ ]  Yes [ ]  No

**If No, your application will be considered incomplete.** Simply stating that the cost is too great is not sufficient. Documentation of costs must be provided; however, each alternative should be evaluated on an equivalent cost basis.

| **For Public Water Supply (in addition to 1-10 above)** | **Page Number(s)** |
| --- | --- |
| 1. Include all applicable alternatives contained in the local or regional water supply plan developed in accordance with [9VAC25-780](https://law.lis.virginia.gov/admincode/title9/agency25/chapter780/)
 |  |
| 1. Include all alternatives that are not practicable that had not been identified in the local or regional water supply plan developed in accordance with 9VAC25-780
 |  |
| 1. Identify water conservation measures that could be considered to reduce demand for each alternative considered
 |  |
| 1. Describe the opportunities and status of regionalization efforts undertaken
 |  |
| 1. Describe the opportunities and status of the interconnectivity of water systems
 |  |
| 1. Describe the opportunities and status of the ability to purchase water from other suppliers
 |  |

1. **WATER CONSERVATION AND MANAGEMENT PLAN (see** [**9VAC25-610-100**](http://9VAC25-610-100)**)**

| **General Plan Information** | **App. Page No.** |
| --- | --- |
| 1. Presented as a stand-alone document
 |  |
| 1. Demonstrate that the plan is consistent with local and regional water supply plans in the applicant’s geographic area as required by 9VAC25-780
 |  |
| 1. Documentation of individual metered connects
 |  |
| 1. Requirement for water savings equipment and processes
 |  |
| 1. Requirement for leak detection and water loss reduction program
 |  |
| 1. Requirement for water use education program
 |  |
| 1. Requirement for evaluation of potential water reuse options
 |  |
| 1. Requirement for water use reductions during drought or water use emergencies
 |  |
| 1. Requirement for water use restrictions during drought or water use emergencies
 |  |
| 1. Requirement for penalties for failure to comply with mandatory water use restrictions (municipal facilities only)
 |  |

1. **LOCAL AND AREAWIDE PLANNING REQUIREMENTS**

[ ]  The Local Government Ordinance Form (LGOF) is signed and attached as Page \_\_\_\_\_ of the application.

[ ]  Documentation demonstrating that the county, city or town failed to respond to the LGOF is attached as Page \_\_\_\_\_ of the application.

1. **MITIGATION PLAN (see** [**9VAC25-610-110 D 3 g**](https://law.lis.virginia.gov/admincode/title9/agency25/chapter610/section110/)**)**

[ ]  Department provided mitigation plan template completed and attached as Page \_\_\_\_\_ of the application.

If Department provided mitigation plan template was not used, please complete table below for the provided mitigation plan:

| **General Mitigation Plan Information** | **Page Number(s)** |
| --- | --- |
| 1. Presented as a stand-alone document
 |  |
| 1. Contains a rebuttable presumption that water level declines that cause adverse impacts to existing wells within the area of impact are due to proposed withdrawal
 |  |
| 1. Contains a commitment by the applicant to mitigate undisputed adverse impacts due to the proposed withdrawal in 72 hours
 |  |
| 1. Contains a process to resolve disputed claims for mitigation
 |  |
| 1. Contains a statement requiring claimant provide necessary documentation for claim resolution
 |  |

1. **ADDITIONAL INFORMATION REQUESTED BY DEPARTMENT**

Does the Pre-Application Meeting Form note any additional information required?

[ ]  Yes [ ]  No

If Yes, the additional information is attached as Page \_\_\_\_\_ of the application.

1. **APPLICATION FEE**

Amount: Date Submitted:

[ ]  Agricultural Application – No Fee

1. **APPLICANT CERTIFICATION AND SIGNATURE**

| **General Information** | **Page Number(s)** |
| --- | --- |
| 1. Application is signed in accordance with the Groundwater Withdrawal Regulations [9VAC25-610-150](https://law.lis.virginia.gov/admincode/title9/agency25/chapter610/section150/)
 |  |
| 1. Application contains certification statement
 |  |

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information."

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

*Applicant Printed Name*

***\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_***  ***\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_***

*Applicant Signature*  *Date*

1. **AGENT/CONSULTANT CERTIFICATION**

*“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.*

*I hereby certify that the plans and computations herein are in compliance with the Groundwater Management Act of 1992 and attendant regulations, and applicable DEQ guidance.”*

 **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

*Applicant Printed Name*

***\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_***  ***\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_***

*Applicant Signature*  *Date*