|  |  |  |  |
| --- | --- | --- | --- |
| **Project Name:** |       | **Date:** |       |
| **Engineer Name:** |       | **AK P.E. License No.:** |       |
|  |
| This checklist is required for a source that is 50 feet or less below ground (to the first opening or screened interval) or within 500 feet of a surface water. **Please contact your local Drinking Water Program prior to completing this checklist**; contact information can be found here: [http://dec.alaska.gov/eh/dw/contact/.](http://dec.alaska.gov/eh/dw/contact/)The intent of this checklist is to guide an engineer, hydrologist, or other qualified individual, in gathering and analyzing existing information to support a source determination. Drinking water sources must be determined to be groundwater, groundwater under the direct influence of surface water (GWUDISW) or surface water to establish regulatory requirements. Please see 18 AAC 80.1990(a) (64), (66), and (140) for source definitions.In order to provide transparency to the regulated community, DEC has created a GWUDISW screening guidance; it may be accessed from the checklist table (under Checklist 3.1a) on DEC’s website at <http://dec.alaska.gov/eh/dw/engineering/plan-review-checklist/>. This is an internal DEC document explaining how DEC evaluates the information provided in Checklist 3.1a. This guidance document should not be used in lieu of Checklist 3.1a. Contact a local DEC Drinking Water Program engineer if further information is needed on how to use the DEC GWUDISW Screening Guidance.If the existing information does not result in a conclusive groundwater determination, then in the interest of protecting public health, treatment may be required. The Drinking WaterProgram will work with the system on any proposed source improvements or advanced studies that would be necessary to complete a source determination. **Plans for source modifications or advanced studies MUST be approved by the Drinking Water Program before implementation.****Note:** When completing this checklist, please answer the question and also include where in the submittal detailed information is found for each submittal requirement. Please be as specific as possible (specify document name, page number, section number, paragraph, etc.). This will accelerate the review process. |

| **Submittal Considerations** | ***Regulatory Reference*** |
| --- | --- |
|  |  |
| 1. **Source Construction and Current Condition:** Does the submittal include information about the construction of the source, such as a well log, aquifer test or well yield results, construction drawings, photographs, etc? Does the discussion of the source existing conditions include whether the source construction complies with 18 AAC 80.015 and if it is adequately protected from surface runoff? Have any modifications been made since the original construction?
 | *18 AAC 80.015**18 AAC 80.605(c)(1)(A)**18 AAC 80.605 (c)(2)* |
|  |  |
| 1. **Surface Water Proximity:** Does the site plan show the location of the source and the horizontal distance from all surface waters within 500 feet regardless of property lines or ownership? What is the flooding risk? Provide photographs with descriptions.
 | *18 AAC 80.605(c)(1)(A)* |
|  |  |
| 1. **Aquifer Characteristics:** What is the thickness and lateral extent of confining layers, if any? What additional existing information is provided that may be useful in this evaluation such as proximal well logs or hydrogeological assessments?
 | *18 AAC 80.605(c)(2)(C)* |
|  |  |
| 1. **Water Elevations:** What are the relative elevations of the static water level of the source and the nearby surface waters? How were elevations determined and is any information provided describing significant variations in static water level and nearby surface water with pumping, precipitation, and seasons?
 | *18 AAC 80.605(c)* |
|  |  |
| 1. **Waterborne Disease History:** Discuss the history/circumstances of any waterborne disease outbreaks directly related to the water source.
 | *18 AAC 80.605(c)(1)(C)* |
|  |  |
| 1. **Raw Water Quality:** Are there any existing laboratory results for biological quality, turbidity, or other water quality parameters that may be useful for comparing the source to nearby surface water? If so, discuss how the water quality data supports a source water determination.
 | *18 AAC 80.605(c)(1)(B)* |
|  |  |
| 1. **Proximity to Other Potential Pathways**: Are there potential pathways on the property or nearby such as improperly abandoned, maintained, or constructed boreholes, pits, or wells that may allow surface water to infiltrate easily through the subsurface?
 | *18 AAC 80.205(b)(9)**18 AAC 80.605(c)* |
|  |  |
| 1. **Other Information**: Is there any other existing information that may assist the Department in making a source determination?
 | *18 AAC 80.205(b)(9)**18 AAC 80.605(c)* |
|  |  |
| **Advanced Studies\***The Department may require collection of additional information to make a source determination. Three examples of additional information could include those listed below from 18 AAC 80.605(c)(3-5): |
| * **DEC Drinking Water Program Field Assessment:** A field assessment by the Department would include a thorough inspection of the source construction and surrounding area.
 |
| * **Water Quality Assessment Plan**: This plan would be structured to compare and evaluate the source and nearby surface water by assessing physical, biological, and chemical characteristics for significant and relatively rapid shifts in water quality parameters such as turbidity, temperature, conductivity, and pH which closely correlate to climatological or surface water conditions.
 |
| * **Advanced Testing Plan**: A plan for advanced water quality testing and analysis may include microscopic analysis of particulate matter, particle count analysis, specific ion ratio, or tracers/dyes.
 |
| **\* Contact the reviewing Drinking Water Program office first to determine if these items are required, and to obtain approval of the data collection, analysis, and evaluation plan.** |