



Pesticide-Use Permit Application Packet To Apply Pesticides to Water

Instructions

- Pesticide-use permits are required under the following circumstances:
 - **Aerial:** Application of pesticide from any type of aircraft or hovercraft, regardless of who owns the land being treated.
 - **Aquatic:** Application of pesticide to a pest located in a water body, including creeks, rivers, streams, ponds, wetlands, and swamps, regardless of who owns the surrounding lands. For vegetation, if the roots are in the water, this is considered an aquatic application even if only the emergent vegetation is treated.
 - **Public Project On Multiple Properties:** Pesticide program or project by a government entity (state, borough, or city) that applies pesticide to more than one property.
- This packet contains instructions and application forms for obtaining a permit to apply pesticides to waters of the state, including both fresh and marine waters.
- **Each** item must be completed and included in your application. Please address each item. If the required information is not applicable please include a brief explanation.
- An Alaska Pollution Discharge Elimination System (APDES) Permit from the DEC Division of Water is required before a pesticide may be applied to surface water. The APDES permit must be obtained **prior** to applying for an ADEC Pesticide Use Permit. For more information, contact Jim Rypkema at james.rypkema@alaska.gov, or (907) 334-2288.
- Check off each item as you complete it, and submit the entire packet and required information to the DEC Pesticide Program, at the address shown below.
- A notice of application is required for ALL permits. Once your application is complete, ADEC will provide the required text for you to post in local newspapers. You must also submit an affidavit of publication once publication is complete. 18 AAC 15.020, 18 AAC 15.050, 18 AAC 90.520
- The requested information in this form represents the minimum that is required under 18 AAC 90, 18 AAC 15.020, and 18 AAC 15.050; additional information can and should be provided as necessary or applicable.
- Please do not staple items, renumber required attachments, or alter the form in any way.
- You may submit all items EXCEPT the signature page electronically. The original signed signature page must be mailed or delivered to the address below.

Alaska Department of Environmental Conservation
Pesticide Control Program
1700 E. Bogard Road, #B103
Wasilla, Alaska 99654
907-376-1870
www.dec.state.ak.us/eh/pest/



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Part One: Contact Information

APPLICANT (Person, organization, or business applying for this permit)

Organization/business State of Alaska Department of Natural Resources

Contact person Daniel Coleman

Mailing address 5310 S Bodenburg Spur

City, State, Zip Palmer, Alaska, 99645

Telephone Number (907)745-8721

Email Address daniel.coleman@alaska.gov

Is the applicant a government entity?

18 AAC 90.620

☒

Yes

☐

No

APPLICATOR (Person, organization, or business who will be applying the pesticides)
MUST BE A CERTIFIED APPLICATOR

Organization/business State of Alaska Department of Natural Resources

Contact person Daniel Coleman

Mailing address 5310 S Bodenburg Spur

City/State/Zip Palmer, Alaska, 99645

Telephone Number (907)745-8721

Email Address daniel.coleman@alaska.gov

Pesticide Applicator Certification Number 10256-2103-6/9

18 AAC 90.515(13)



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✓	#	Part Two: Treatment Location Information
	1	<p>Treatment site location: 18 AAC 90.515(8)(A)</p> <p>Street Address <u>Jewel Lake, 4401 W Dimond Blvd</u></p> <p>City <u>Anchorage, AK 99502</u></p> <p>OR</p> <p>For remote areas, fill in an informal location description such as mileposts, landmarks, distance and direction from nearest community, latitude and longitude, UTM coordinates, etc.</p> <div><ul style="list-style-type: none">• Meridian, Township, Range and Section: Seward, 012N, 004W, 10• Lat/Long: 61.137881° -149.964006°</div>
	2	<p>Describe treatment site (lake, stream, river, wetland, etc.), including inflow and outflow characteristics, stream flow, etc.:</p> <div><p>Jewel Lake is located in the South Anchorage urban area between Jewel Lake Park and Dimond Blvd. Jewel Lake is approximately 27.7 surface acres in size, has a maximum depth of 14 feet, an approximate volume of 276 acre-feet and an average depth of just under 10 feet deep. Approximately 2/3 of the shoreline of Jewel Lake is developed residential housing and the other 1/3 is undeveloped land and park lands.</p></div>
	3	<p>List each public or private drinking water system within 200 feet of the treatment area. 18 AAC 90.515(8)(D)</p> <div><p>There are 3 wells on record within 200 feet of Jewel Lake registered with the State of Alaska's WELTS Program. The well log IDs for these wells are: 25024, 23657, and 6823. Please refer to Attachment 4 for a drinking water system map of Jewel Lake.</p></div>
	4	<p>Approximate size of the treatment area. Please specify units (acre feet, flow rate, etc. The units should match units on the pesticide label):</p> <p>18 AAC 90.515(8)(B)</p> <p><u>27.7 surface acres, 276.3 acre-feet. The entire lake will be treated.</u></p>



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✓	#	Part Two: Treatment Location Information
	5	<p>If the treatment location has been identified as habitat for an endangered or threatened species, list each species and category (threatened, endangered). 50 CFR 17.11-12</p> <div><p>The proposed treatment location is not identified habitat for endangered or threatened species.</p></div>

✓	#	Part Three: Treatment Information
	1	<p>List the dates & times (or range of dates and times) that pesticide is proposed to be applied: 18 AAC 90.515(9)</p> <div><p>The goal is eradication and multiple treatments annually over 3 years are planned for the infested lake. However, not all treatments may be needed pending a post-treatment assessment of herbicide efficacy. Water samples will be taken to ensure effective concentrations are maintained. Treatment timing:</p><p>Jewel Lake – whole lake treatment plan</p><p>Treatment 1 – May-July 2019 Treatment 2 – August-October 2019 Treatment 3 – May-August 2020 Treatment 4 – May-August 2021 Treatment 5 – May-August 2022 (if necessary)</p><p>The goal is to eradicate elodea by maintaining a lethal concentration (to elodea) of fluridone in the eradication zone (whole lake) for 45-90 days annually. To ensure concentrations are maintained, water samples will be collected from spatially distributed sites to cover the full acreage and range of depths. Samples will be taken at 6-week intervals beginning 2 weeks following initial application of herbicide. All water samples will be collected using protocols established by and sent overnight to SePRO Corporation's analytical laboratory in Carmel, Indiana for immunoassay following the techniques described by Netherland et al. (2002). If mean fluridone concentrations fall below 75% of the target level for two consecutive samples, then supplemental fluridone will be added (but not to exceed 150 ppb annually).</p></div>



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✓	#	Part Three: Treatment Information																					
	2	<p>Target pest of pesticide project: 18 AAC 90.515(2)</p> <table border="1"><thead><tr><th>✓</th><th>Category</th><th>List specific targets</th></tr></thead><tbody><tr><td></td><td>Fungus</td><td></td></tr><tr><td>X</td><td>Vegetation</td><td>Elodea spp.</td></tr><tr><td></td><td>Insects</td><td></td></tr><tr><td></td><td>Fish</td><td></td></tr><tr><td></td><td>Rodents</td><td></td></tr><tr><td></td><td>Other</td><td></td></tr></tbody></table>	✓	Category	List specific targets		Fungus		X	Vegetation	Elodea spp.		Insects			Fish			Rodents			Other	
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	3	<p>Provide a description of the method of pesticide application, including details about any equipment that will be used. 18 AAC 90.515(10)</p> <div><p>Material and equipment will be transported to the site by truck. Pesticide dispersal will be made directly into the lake by DEC-certified applicators from boats.</p><p><u>Pellet Application</u> Boats will be equipped with apparatus to deliver pelleted (SonarONE) herbicide to the water body. Pellets will be applied using a forced air blower system mounted to a boat. The blower system will be calibrated using clay pellets with the same size and weight as the herbicide pellets. A set weight of training pellets will be passed through the blower to measure the time required to deliver, and this will be repeated several times to obtain an average. That information will be used to determine how many minutes are required to deliver the full prescription to the treatment area. Application routes will be determined based on swath width of the blower and programmed into onboard GPS equipment to be followed by the operator of the application vessel. The speed will be determined by the amount of time required to deliver the prescribed weight of pellets to the treatment area.</p></div>																					



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✓	#	Part Four: Pesticide List
	1	<p>List the common or brand name of EACH proposed pesticide and adjuvant. 18 AAC 90.515(1)</p> <ul style="list-style-type: none">• Pesticides MUST be registered in the State of Alaska.• Adjuvants MUST be registered in the State of Washington to be considered for use in Alaska. <div><p>SonarONE (fluridone)</p><ul style="list-style-type: none">• EPA Registration # 67690-45</div>
	2	<p>Total number of pesticides and adjuvants listed: <u>1</u></p>

To find pesticide products registered in Alaska, search by EPA registration number here:
<http://www.kellysolutions.com/ak/pesticideindex.htm>

To find adjuvants registered in Washington, search here <http://cru66.cahe.wsu.edu/labels/Labels.php>. For "Item to search on", select "Crop". For "Common name", select "adjuvant".



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✓	#	Part Five: Product Information For EACH proposed pesticide and adjuvant, fill out the following information. Copy and attach additional sheets for each product. <small>18 AAC 90.515(1-6)</small>				
	1	Common or brand name of proposed pesticide or adjuvant detailed on this sheet: <u>SonarONE</u>				
	2	EPA Registration Number (not applicable for adjuvants): <u>67690-45</u>				
	3	Specify the formulation of the pesticide or adjuvant (liquid, granular, aerosol, etc.): <u>Granular (pellet)</u>				
	4	Name of the seller or distributor from whom the pesticide will be obtained: <u>SePRO Corporaion</u> OR Check here if pesticide is from a previous surplus <input type="checkbox"/> <small>18 AAC 90.515(1)</small>				
	5	List each active ingredient (or principal functioning agent) in this product AND its percent composition: <table border="1"><thead><tr><th>Active Ingredient</th><th>% composition</th></tr></thead><tbody><tr><td><u>Fluridone</u></td><td><u>5%</u></td></tr></tbody></table>	Active Ingredient	% composition	<u>Fluridone</u>	<u>5%</u>
Active Ingredient	% composition					
<u>Fluridone</u>	<u>5%</u>					
	6	Pesticides: list the adjuvant (if any) it will be mixed with. Adjuvants: list the pesticides it will be mixed with. <u>N/A</u>				



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✓	#	Part Five: Product Information For EACH proposed pesticide and adjuvant, fill out the following information. Copy and attach additional sheets for each product. 18 AAC 90.515(1-6)									
		<p>Product Name <u>SonarONE</u></p> <p>Which treatment scenarios are described in questions 6-8? <u>1-5</u></p>									
	7	<p>If this product will be diluted prior to application to the water body, specify the rate of dilution as it will be applied for this project: 18 AAC 90.515(6)</p> <p>Not applicable – product won't be diluted <input checked="" type="checkbox"/></p> <p>UNITS MUST MATCH LABEL INSTRUCTIONS</p> <p>Amount of product (list units) <input type="text"/></p> <p>Amount of diluent (list units) <input type="text"/></p> <p>Examples: <table border="1"><tr><td>3 oz product</td></tr><tr><td>1 gallon water</td></tr></table></p>	3 oz product	1 gallon water							
3 oz product											
1 gallon water											
	8	<p>Rate of application that will be used for this project: 18 AAC 90.515(6)</p> <p>UNITS MUST MATCH LABEL INSTRUCTIONS</p> <p>Amount of product (list units) <input type="text" value="8.6 lb"/> per <input type="text" value="1 acre"/></p> <p>On which page of the label is this application rate found? <u>3</u></p> <p>Examples: <table border="1"><tr><td>15 gallons</td><td>per</td><td>acre foot</td></tr><tr><td>6 lbs</td><td>per</td><td>1000 gallon</td></tr><tr><td>Spray, to wet</td><td></td><td></td></tr></table></p>	15 gallons	per	acre foot	6 lbs	per	1000 gallon	Spray, to wet		
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✓	#	Part Five: Product Information For EACH proposed pesticide and adjuvant, fill out the following information. Copy and attach additional sheets for each product. 18 AAC 90.515(1-6)																				
	9	<p>Total amount of product that will be applied to the treatment site for each application: 18 AAC 90.515(6)</p> <p>UNITS MUST MATCH LABEL INSTRUCTIONS</p> <table border="1"><thead><tr><th>Application Rate (from Part 5, Question 7)</th><th></th><th>Application Area Size (from Part 2, Question 4)</th><th>=</th><th>Total Volume</th></tr></thead><tbody><tr><td>8.6 lbs/1 acre</td><td>*</td><td>27.7 acres</td><td>=</td><td>238.22 lbs</td></tr></tbody></table> <p>Example:</p> <table border="1"><tbody><tr><td>15 gallons/acre-foot</td><td>*</td><td>100 acre-feet</td><td>=</td><td>1500 gallons</td></tr><tr><td>6 lbs/1,000 gallons</td><td>*</td><td>2,000 gallons</td><td>=</td><td>12 lbs</td></tr></tbody></table>	Application Rate (from Part 5, Question 7)		Application Area Size (from Part 2, Question 4)	=	Total Volume	8.6 lbs/1 acre	*	27.7 acres	=	238.22 lbs	15 gallons/acre-foot	*	100 acre-feet	=	1500 gallons	6 lbs/1,000 gallons	*	2,000 gallons	=	12 lbs
Application Rate (from Part 5, Question 7)		Application Area Size (from Part 2, Question 4)	=	Total Volume																		
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✓	#	Part Six: Storage and Disposal	18 AAC 90.615
	1	List the location where pesticide will be stored prior to final disposal. Physical Address <u>Alaska Plant Materials Center</u> City, State, Zip <u>5310 S. Bodenburg Spur, Palmer, AK 99645</u>	
	2	Describe how and where excess <u>mixed</u> pesticides and adjuvants will be disposed: <div style="border: 1px solid black; padding: 5px; margin-top: 5px;"><u>SonarONE is a pelleted, granular pesticide and will not be mixed.</u></div>	
	3	Describe how and where empty pesticide and adjuvant containers will be disposed: <div style="border: 1px solid black; padding: 5px; margin-top: 5px;"><u>Emptied containers will be triple-rinsed, punctured, and crushed on-site. These containers will later be offered for recycling at the landfill recycling center or disposed of in the landfill if not accepted for recycling.</u></div>	
	4	If excess material or empty containers will be disposed in a landfill, provide the following information: Facility Name <u>Anchorage Regional Landfill</u> City, State, Zip <u>Eagle River, AK 99577</u> Date when disposal site was contacted to confirm acceptance of materials: <u>28 February 2019</u>	



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Please provide EACH required item in a separate, stand-alone document.

Check off each item that is attached. Some items may not be applicable; if so, check the N/A column.

Part Seven: Supporting Documentation			
✓	#	N/A	Item
X	1.	Required	Justification for the pesticide application - why you need to apply a pesticide and the benefits you expect to achieve from the treatment.
X	2.	Required	Map that shows the location of the treatment area within the state of Alaska. Map must be issued by the United States (e.g USGS), the State, or the Municipality.
X	3.	Required	Maps and/or aerial photos that show details within the treatment area, included areas where pesticides will be applied. Map/photo must include a scale to show distances.
X	4.		Map and/or aerial photo that shows the treatment area and the location of all sources of drinking water within 200 feet of the treatment area. Map/photo must include a scale to show distances.
X	5.	Required	EPA approved label for each proposed pesticide and adjuvant to be used.
X	6.	Required	Material Safety Data Sheet for each proposed pesticide and adjuvant to be used.
X	7.	Required	Description of potential impacts to the environment and non-target plants and animals including invertebrates. Should address any potential impacts to biodiversity and distribution of species, potential for anoxia due to plant decomposition, impact to the overall ecological health of the water body, and any other expected impacts.
X	8.	Required	Description of precautions planned to protect human health, safety, welfare, animals, and the environment.
X	9.		Proof of liability insurance (for non-government applicants)
X	10.		Information about how the proposed pesticide application might affect any threatened or endangered species that may be found in or near treatment area, and any proposed measures to prevent or reduce impacts.
X	11.	Required	Documentation of compliance with APDES permit requirements (see instructions on page 1).



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Part Eight: Signatures

All applications must be signed as follows, per 18 AAC 15.030:

- **Corporations:** A principal executive officer, an officer that is no lower than the level of vice president, or a duly authorized representative who is responsible for the overall management of the project or operation
- **Partnerships:** A general partner
- **Sole proprietorship:** The proprietor
- **Municipal, state, federal, or other public entity:** A principal executive officer, ranking elected official, or duly authorized employee

I, ROBERT CARTER certify under penalty of perjury, that all of the information
And exhibits in this application and attached documentation are true, accurate, and complete.

[Signature]
Applicant's Signature

05
Month

03
Day

2019
Year

AGRONOMIST III
Applicant's Title