Integrated Pest Management Plan for the Golden Valley Electrical Association Electrical Substation and Communication Site Maintenance Program Fairbanks Area, Alaska

IPM Plan Effective Dates:	May 1, 2024 to April 30, 2026	
	Golden Valley Electric Association (GVEA) substations and	
	communication sites located on lands leased from State of	
Management Area	Alaska in the GVEA service area including Fairbanks, Delta	
Name/Location:	Junction, Salcha, Nenana, Ferry, Healy, and Cantwell, Alaska.	
	Electrical substations and communications sites located on land	
	owned by the State of Alaska and managed by GVEA under	
General Site Description:	leases.	
	Industrial sites that house essential electrical grid and	
Land Uses:	: associated communications infrastructure.	
	DNR PIC: Brent Goodrum, Deputy Commissioner and Director	
	of Lands, Alaska State Department of Natural Resources	
Name of Person in	GVEA IPM Manager: Michael Wise, Electric Shop	
Charge:	Superintendent	
	Contracted Certified Applicators from Alien Species Control,	
Certified Applicator	LLC (Tim Stallard, Paul Bennetts, Carter Joyce, plus new	
Name(s):	staff).	
	Stallard (10901-2605-4/6/9); Bennetts (10670-2405-4/9); Joyce	
Certification Numbers:	(10929-2506-9). Additional applicators to be determined.	

1. Action Thresholds

Check the types or categories of pests that might present a problem or need to be controlled at this management site:

	Category
✓	Vegetation
	Insects
	Fungus
	Rodents
	Other (describe below)

For each pest category listed above, describe the level at which the pest becomes a problem which requires control measures to be taken.

The action level at GVEA substations and communication sites is the presence of any vegetation at or within the site enclosure. In accordance with GVEA policy and industry best practices, electrical substation and communication sites are to be maintained at a bare-ground, vegetationfree condition. Elimination of vegetation from these sites is important to:

- prevent fire and electrical hazards,
- eliminate safety hazards,
- avoid interference with electrical equipment,
- maximize visibility and accessibility of equipment for inspections and maintenance, and
- protect equipment from corrosion and pests.

2. Monitor and Identify Pests

How often will the management area be inspected for the presence of pests?

GVEA personnel and/or Contracted Certified Applicator will inspect each substation or communication site for vegetation growth approximately once per year. Inspections may be performed more frequently at any site if GVEA receives a report of hazardous or excessive vegetation growth.

Which locations will be inspected?

Inspections will be performed at electrical substations or communication sites that are located on land owned by the State of Alaska. Inspections will include all enclosed areas and fence lines enclosing each site.

What methods will be used for identifying and quantifying the presence of pests?

Visual surveys will be used to identify presence and type(s) of vegetation and, where applicable, quantify the height and density of vegetation.

How will pest species be identified?

Vegetation will be identified as present or absent and should be categorized using basic types (e.g. woody, forb, grass).

Describe record keeping procedures:

Vegetation inspection and management records will be maintained in an electronic format by the GVEA IPM Manager at GVEA headquarters in Fairbanks Alaska. Records will be forwarded annually to Alaska DNR.

A record of each control action will include the product or brand name of the pesticide, the EPA registration number of the pesticide, the date of use, the address or location of use, the site of use, the size of the area treated, the rate of application, the dilution of the pesticide applied, the total amount of pesticide product used, the target pests, the name and certification number of the person applying the pesticide, and a copy of any instructions provided to the pesticide technicians under a certified applicator's supervision.

A record of each inspection, including control follow-up inspections, will include the date, location, inspector name and pertinent observations, including any recommendations for follow-up control actions.

3. Prevent Pests

For each pest category listed under Section 1, describe preventative measures that will be taken:

A surface of clean, crushed gravel is laid over the electrical ground grid at each substation and communication site to provide an insulating layer between the grid and the ground surface. The gravel surface deters vegetation growth by minimizing soil moisture retention and creating unfavorable germinating conditions.

How often will preventative measures be applied?

Gravel surfaces will be inspected and maintained approximately every 2 to 5 years or as needed.

4. Control Measures

For each pest category listed under Section 1, list potential non-chemical control measures that may be used:

Cultural Controls:	Cultural controls do not apply to these sites.		
Mechanical	Vegetation may be pulled by hand, mowed, cut (e.g. with string		
Controls:	trimmers, pruners or chainsaws), or dug with shovels/hoes.		

For each pest category listed under Section 1, describe the characteristics needed in any chemical controls that may be used:

Chemical treatment must include a systemic herbicide to ensure entire plants and root systems are eradicated. Due to the bare-ground management objective and spatial distribution of sites, product should have residual, pre-emergent characteristics to reduce the frequency of required application and prevent vegetation growth.

For each pest category listed under Section 1, list potential chemical controls that may be used:

Target Pest	Product Name	EPA Registration Number
Vegetation	Alligare Glyphosate 5.4	81927-8
Vegetation	Alligare Triclopyr 4	81927-11
Vegetation	Alligare Ecomazapyr 2 SL	81927-22
Vegetation	BASF Arsenal Applicator's Concentrate	241-299
Vegetation	BASF Arsenal Herbicide	241-346
Vegetation	Bayer Esplanade 200 SC	432-1516
Vegetation	Bayer Method 240 SL	432-1565
Vegetation	Cornerstone 5 Plus	1381-241

Vegetation	Escort XP	432-1549
Vegetation	Foresters' Non-Selective Herbicide	228-381
Vegetation	Garlon 4 Ultra	62719-527
Vegetation	Milestone	62719-519
Vegetation	Oust XP	432-1552
Vegetation	Roundup Custom for Aquatic and Terrestrial Use	524-343
Vegetation	Roundup ProMax	524-579

Describe how treated areas will be re-inspected and evaluated for effectiveness of controls:

Following application of controls (mechanical or chemical), GVEA personnel or GVEA's Contracted Certified Applicator will re-inspect treated areas to determine if the applied controls achieved the target control level.

GVEA personnel and Contracted Certified Applicator will evaluate the effectiveness of controls. If control actions did not achieve the target control level, the certified applicator will recommend modifications or additional controls.