Natural Resources Conservation Service, Pacific Islands Area **PIA-315AB-IR, February 2022**

HERBACEOUS WEED TREATMENT – MECHANICAL - CHEMICAL

Client		**Date**	
Farm/Tract		**Field(s)**	
Location		**Acres**	
Planner		**CINs (if applicable)**	

1. Purpose/Management Objectives (check one or more)

☐* Enhance accessibility, quantity, and/or quality of forage and/or browse.

☐* Restore or release native or create desired plant communities and wildlife habitats consistent with the site potential.

☐* Protect soils and control erosion.

☐* Reduce fine fuel loads and wildfire hazard.

☐* Manage fuel loads to achieve desired conditions.

☐* Pervasive plant species are controlled to a desired level of treatment that will ultimately contribute to creation or maintenance of an ecological site description “steady state” addressing the need for forage, wildlife habitat, and/or water quality.

☐* Improve rangeland health

Goals/Objectives:

2. Maps included with this specification

✓ Plan map showing area to be treated, areas not to be disturbed, and any sensitive areas

✓ Soil map

3. Desired Plant Communities and Target Herbaceous Weed Species

Desired Plant Community Composition, Structure, and Function	Target Species	Pervasive*?	% Cover (before)	%Cover (after)
		☐ Yes ☐ No		
		☐ Yes ☐ No		
		☐ Yes ☐ No		

*See PIA Pervasive Plant List in eFOTG, Section IV, 315 Folder.

4. Monitoring Plan

Monitoring is done to assess degree of herbaceous weed control and to identify areas needing further treatment.

Monitoring will be performed by NRCS and/or landowner at least annually at the end of the growing season following treatment.

Percent cover or density of the target species (see item 2 above) will be measured and compared to desired percent cover or density (% cover after (item 2 above)). If the measured amount is less than or equal to the desired amount, this practice is to be considered complete.

HERBACEOUS WEED TREATMENT – MECHANICAL - CHEMICAL

5. Treatment Schedule

Include all treatments needed to achieve effective control of the target plant species

Treatment unit	Treatment Type	Planned Treatment Year	Planned Acres
	☐ Mechanical ☐ Chemical		
	☐ Mechanical ☐ Chemical		
	☐ Mechanical ☐ Chemical		
	☐ Mechanical ☐ Chemical		
	☐ Mechanical ☐ Chemical		
	☐ Mechanical ☐ Chemical		
	☐ Mechanical ☐ Chemical		
	☐ Mechanical ☐ Chemical		
	☐ Mechanical ☐ Chemical		

6. Selected Mechanical Treatment Method (check one)

☐	Conventional tillage	☐	Mowing
☐	Hand Treatment (loppers, chain saw, etc.)	☐	Other (Describe):

7. Kind of Equipment and any modifications necessary to enable the equipment to complete the job.

8. Timing or Season for Mechanical Treatment

Dry season operations will be done in a manner consistent with fire safety precautions and in compliance with local, state, and federal fire regulations. Activities performed under this practice will be achieved in a manner in consideration of fire and fuel loading issues regardless of the timing of the treatment. Timing will also consider any mitigation necessary for sensitive species in the area that may be impacted by this practice.

9. Operating Instructions for Mechanical Treatment

Prior to arriving at the treatment site, all equipment and vehicles will be cleaned in order to reduce the introduction or spread of noxious weeds. Where tracked vehicles are used, turning in-place will be minimized to avoid unnecessary impacts to soils, non-target plants, or other resources.

HERBACEOUS WEED TREATMENT – MECHANICAL - CHEMICAL

10. Revegetation Requirements

Identify the appropriate revegetation practice to follow treatment to ensure the resource concern is addressed.

11. Selected Chemical Treatment Method (check one treatment and one application)

☐	Broadcast Treatment	☐	Individual Plant Treatment (IPT aka spot treat)
☐	Foliar Application	☐	Soil Application

HERBACEOUS WEED CONTROL CHEMICAL ALTERNATIVES				
	Alt. No. 1	**Alt. No. 2**	**Alt. No. 3**	**Alt. No. 4**
Target Species				
Chemical				
Rate				
Acceptable Dates or Plant Growth Stage for Application				
WIN-PST Rating				
Grazing or Slaughter Restrictions				
Remarks				
Caution				
Source of Recommendation				

➢**All chemicals will be applied according to label instructions.**

➢**WinPST evaluations are attached. Ratings of Intermediate or higher require mitigation measures as described below.**

☐➢**Integrated Pest Mgt. 595 is required to mitigate potential hazards.**

Any special mitigation, timing considerations or other factors (such as soil texture and organic matter content) that must be considered to ensure the safest, most effective application of the herbicide:

HERBACEOUS WEED TREATMENT – MECHANICAL - CHEMICAL

12. Kind of Equipment and any modifications necessary to enable the equipment to complete the job.

13. Operating Instructions for Chemical Treatment

Prior to arriving at the treatment site, all equipment and vehicles will be cleaned in order to reduce the introduction or spread of noxious weeds.

14. Wildlife Requirements

All work will be performed at times that meet the needs of resident and transient wildlife. Additional avoidance measures may be required if Threatened, Endangered, or Special Status species or their habitat is found on-site. Describe avoidance and minimization (A&M) measures determined in Biology Tech Note 18 Attachment A. Examples of A&M measures include avoiding sensitive times of year or other BMPs to minimize effect on wildlife.

15. Cultural Resources

All work will be performed in accordance with the requirements of the cultural resource review.

16. Additional Requirements

Prior to commencement of any mechanical clearing that will result in ground disturbance, a utility check must be completed to make sure all underground utilities are avoided. The landowner/ operator or contractor shall call 1-866-423-7287 or 811 or appropriate local utilities to determine the existence of utilities at least 5 days prior to excavation.



17. Operation and Maintenance

- Monitor each year to evaluate desired plant community and any regrowth or recurrence of target pest species. Apply appropriate spot treatments as needed to maintain desired plant community.
- Review and update the plan annually to incorporate new IPM technology.
- Maintain mitigation techniques selected to ensure continued effectiveness. This may include a grazing plan (see Prescribed Grazing for details), which may include deferment, to improve the health and vigor of desired perennial herbaceous species or seeding to provide desired understory vegetation.
- Develop a safety plan for individuals exposed to pesticides
- Follow labels requirements for mixing/loading setbacks from wells, streams, rivers and natural or impounded pond and reservoirs.

- Post signs according to label directions and/or Federal, state and local laws around treated sites. Follow restricted entry intervals.
- Dispose of pesticide containers according to label directions and Federal, state and local regulations.
- Calibrate application equipment according to University of Hawaii Cooperative Extension and/or manufacturer recommendations before each seasonal use and with each major chemical change.
- Replace worn nozzle tips, cracked hoses and faulty gages.
- Handle all pesticides with caution and wear appropriate protective clothing according to label instructions.
- Maintain appropriate Material Safety Data Sheets (MSDS).
- Maintain records of pesticide application for restricted use materials as per the Hawaii Department of Agriculture record keeping requirements.

18. References

NRCS does not develop chemical treatment recommendations; however, NRCS can provide current acceptable chemical control references. A list of these references is below:

- https://www.ctahr.hawaii.edu/invweed/weedsHi.html
- https://www.ctahr.hawaii.edu/invweed/farmers.html
- https://www.ctahr.hawaii.edu/oc/freepubs/pdf/WC-10.pdf
- http://www.epa.gov/espp/

Design Approval

Practice code No.	Practice	Lead Discipline	Controlling factor	Units	Job class				
					I	II	III	IV	V
315	Herbaceous Weed Treatment	Graz Land Spec	Method	Type	Mech	Biol.	Chem.	All	All
				This practice is classified as Job Class (check one):	☐	☐	☒	☐	☐

Design Approved By: /s/ _____ Date: _____

Job title/JAA _____

Client's Acknowledgement Statement

The Client acknowledges that:

a. They have received a copy of the specification and understand the contents and requirements.

b. It shall be the responsibility of the client to obtain all necessary permits and/or rights, and to comply with all ordinances and laws pertaining to the application of this practice.

c. The completed job shall be workmanlike and present a good appearance. The contractor or participant shall conduct all work in accordance with proper safety procedures.

d. After the practice has been completed, a site inspection will be made to determine whether the practice was properly applied and adequate control has been achieved. A practice certification form will be completed by the planner.

Accepted By: /s/_____ Date: _____

HERBACEOUS WEED TREATMENT – MECHANICAL - CHEMICAL

Certification

Treatment unit	Area Treated	Method of Measurement	Inspection Date	Inspector	Certified?

☐ Map(s) – including field numbers, fields treated, and acres treated

☐ Photo monitoring

☐ Other:

Brief Description/Notes

_____

_____

_____

I have completed a review of the information provided by the client and certify this practice has been applied according to the practice standard and the practice implementation requirements above.

Certified By: /s/ _____ Date: _____

Job title _____

Natural Resources Conservation Service, Pacific Islands Area PIA-315AB-IR, February 2022

HERBACEOUS WEED TREATMENT – MECHANICAL - CHEMICAL

Client Documentation Worksheet **Alternative Selected:** ☐**Alternative 1** ☐**Alternative 2** ☐**Alternative 3** ☐**Alternative 4**

Examples in grey

Field No(s)	Date Treated	Applicator Name	Wind Speed/ Direction	Weather*/ Air Temp.	Equipment Used**	Product Name: List all Herbicides, water conditioner, surfactants, or dyes used.	Rate (per acre)	Acres Treated	Total Chemical Used	Amt Water used
14	9/10/2014	Western Spray Inc.	5 mph, S-SE	Partly cloudy, 65 F	UTV sprayer	Product name (Active Ingredient)	4 oz/ac	45	180 oz	10 gal/ac

*Clear, partly cloudy, overcast, showers, etc. ** Back pack sprayer, ATV, Boom sprayer, etc

Comments:

_____
_____
_____
_____
_____
_____
_____