#### HOUSE OF REPRESENTATIVES TWENTY-SEVENTH LEGISLATURE, 2013 STATE OF HAWAII

H.B. NO. <sup>154</sup> H.D. 2 S.D. 1

## A BILL FOR AN ACT

RELATING TO INDUSTRIAL HEMP.

#### BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF HAWAII:

1 SECTION 1. The legislature finds that phytoremediation is 2 the environmentally-friendly science of using plants and trees 3 to remove toxins in the soil, such as metals, pesticides, solvents, explosives, and crude oil. These toxins can be 4 5 reduced by planting specific plants and trees, called hyperaccumulators, in polluted areas. Specifically, these plants and 6 7 trees draw in the toxins, along with beneficial nutrients, 8 through their roots as nourishment and concentrate them in their 9 stems, shoots, and leaves, which can then be harvested and 10 disposed of safely. The nutrient uptake process leaves a clean, 11 balanced, and nutrient rich soil, which can then be safely used 12 for agriculture or improving conservation habitats.

13 The legislature also finds that hemp is a superior 14 phytoremediator because it grows quickly and can extract toxins 15 without the need to remove any of the contaminated topsoil. 16 Other factors that make hemp a superior phytoremediator are its 17 ability to grow unaffected by the toxins it accumulates, its 18 fast rate of absorption, and its ability to bind compound 2013-1933 HB154 SD1 SMA.doc Page 2



contaminants from the air and the soil. A factor that makes the
State a particularly compelling candidate for hemp-based
phytoremediation is that the State's extensive agricultural
operations in the past have left toxins in vast tracts of land.
Phytoremediation will remove those toxins.

6 The legislature also finds that industrial hemp is an 7 environmentally friendly and efficient feedstock for biofuel. 8 Biodiesel plants already in existence in the State are capable 9 of meeting eight per cent of the State's biodiesel needs for 10 ground transportation. These biodiesel plants could increase 11 their efficiency by utilizing industrial hemp as a feedstock, 12 thus reducing the State's reliance on imported fuel.

13 The purpose of this Act is to authorize the director of the 14 college of tropical agriculture and human resources at the 15 University of Hawaii at Manoa to establish a two-year industrial 16 hemp remediation and biofuel crop pilot program.

SECTION 2. (a) The director of the college of tropical agriculture and human resources at the University of Hawaii at Manoa is authorized to establish the two-year industrial hemp remediation and biofuel crop pilot program; provided that the United States Department of Justice, Drug Enforcement

22 Administration, issues the director a federally-controlled



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1 substance registration for the remediation and biofuel crop 2 pilot program. Through the pilot program, the director may 3 determine how soils and water may be made more pristine and healthy by phytoremediation, removal of contaminants, and 4 5 rejuvenation through the growth of industrial hemp, as well as 6 the viability of industrial hemp as a biofuel feedstock. The 7 director shall work in collaboration with the United States Army 8 Corps of Engineers, its affiliates, and the Department of Molecular Biosciences and Bioengineering at the University of 9 10 Hawaii John A. Burns school of medicine to determine the 11 viability of industrial hemp as a biofuel feedstock.

12 (b) The director may submit a final report, including any 13 proposed legislation, to the legislature no later than twenty 14 days prior to the convening of the regular session of 2015 on 15 the following:

The rate of contamination uptake from soil and water; 16 (1)17 The mode of efficient uptake from soil and water; (2) 18 The rate of carbon fixation in the Calvin cycle; (3) 19 (4)The locations in the roots, stems, leaves, and flowers 20 of the plants at which contaminants are fixated; 21 What contaminants are stabilized in the plants; (5)

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1	(6)	What contaminants on the site need additional
2		treatment in order to make the soil or water healthy
3		and pristine;
4	(7)	What disposal method is best for the different
5		contaminants, including petrification, encasement,
6		incineration, burial, and composting;
7	(8)	A baseline for plants cultivated in a clean soil;
8	(9)	The viability of industrial hemp as a biofuel
9		feedstock; and
10	(10)	Any other data deemed important by the director.
11	(c)	The director may adopt rules to implement and set
12	standards of participation for this pilot program.	
13	SECTION 3. No person shall be subject to any civil or	
14	criminal sanctions in this State for growing or possessing	
15	industrial hemp; provided that the person's growing or	
16	possessing of industrial hemp is part of the individual's	
17	participation in the two-year industrial hemp remediation and	
18	biofuel crop pilot program and the person's participation is in	
19	full compliance with the requirements of the program.	
20	SECTION 4. There is appropriated out of the general	
21	revenues	of the State of Hawaii the sum of \$ or so
22	much thereof as may be necessary for fiscal year 2013-2014 and	
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the same sum or so much thereof as may be necessary for fiscal
year 2014-2015 for the two-year industrial hemp remediation and
biofuel crop pilot program.

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4 The sums appropriated shall be expended by the University5 of Hawaii for the purposes of this Act.

6 SECTION 5. This Act shall take effect on July 1, 2112, and7 shall be repealed on July 1, 2015.

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#### Report Title:

Two-year Industrial Hemp Remediation and Biofuel Crop Pilot Program; Appropriation

#### Description:

Authorizes the director of the college of tropical agriculture and human resources at the University of Hawaii at Manoa to establish a two-year industrial hemp remediation and biofuel crop pilot program. Appropriates funds. Effective 07/01/2112. (SD1)

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