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2024 Town of Hilton Head Island Pesticide Hazard Assessment(this does not represent all of the pesticides the town is using as the complete list has never been provided):

[0-0-7 w/ Barricade](#) Pre-emergent granular weed and feed(applied to the turf)

Hazardous to Humans and Domestic Animals

Active - [Prodiamine](#)

Cancer: Listed as causing cancer

Endocrine Disruptor

*[Celsius WC](#) Pre-emergent flowable(applied to the turf)

Hazardous to Humans and Domestic Animals

ENVIRONMENTAL HAZARDS - This chemical has properties and characteristics associated with chemicals detected in groundwater. This chemical may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow. This product is toxic to non-target plants. Non-target plants may be adversely affected if the product is allowed to drift from the areas of application. This product is classified as having high potential for reaching surface water via runoff for weeks after application. Runoff of this product will be greatly reduced by avoiding applications when rainfall or irrigation is expected to occur within 48 hours.

Actives Concentration % by weight Active: 57.4 % [Dicamba](#) - Researchers at the National Institutes of Health have found that use of the pesticide dicamba can increase the risk of

developing numerous cancers, including liver and intrahepatic bile duct cancers, acute and chronic lymphocytic leukemia, and mantle cell lymphoma.

Dicamba moves off-target as a gas. Among the relatively small number of pesticides Dicamba is highly prone to volatilize (turn into a gas). A spike in air temperature can cause these herbicides to turn into a gas even after they have been successfully applied to target surfaces. [Dicamba can travel long distances \(two to three miles\) after target application.](#)

Cancer: Listed as causing cancer

[Endocrine Disruptor](#)

Active: 10% Naphthalene and alkyl naphthalene sulphonic acids [formaldehyde](#) condensate, sodium salt

[Crystalline quartz](#) - Listed as causing cancer

Active: 8.7 % [Thiencarbazone-methyl](#)

ENVIRONMENTAL HAZARDS - Endangered Species Advisory/Protection Requirements - This product may have effects on federally listed threatened or endangered species or their critical habitat in some locations. When using this product, you must follow the measures contained in the Endangered Species Protection Bulletin for the county or parish in which you are applying the pesticide

Active: 1.9 % [Iodosulfuron-methyl-sodium](#)

Cancer: Listed as causing cancer

Reproductive Toxicity

Developmental Toxicity

Very toxic to aquatic life with long lasting effects.

Avoid release to the environment.

[Dismiss](#) Post-Emergent(applied to the turf) Banned - by the European Union and is banned in AK, AZ, CA, NY, OR, SD and VT.

Hazardous to Humans and Domestic Animals

Active: [Sulfentrazone](#)

[Toluene](#)

Cancer: Listed as causing cancer

This product contains a chemical(s) known to cause [birth defects](#) or other reproductive harm.

This herbicide is considered hazardous by the [OSHA Hazard Communication Standard](#)

[n-Butanol](#)

ENVIRONMENTAL HAZARDS - Endangered Species Advisory/Protection Requirements - This product may have effects on federally listed threatened or endangered species or their critical habitat in some locations. When using this product, you must follow the measures contained in the Endangered Species Protection Bulletin for the county or parish in which you are applying the pesticide.

A typical half-life for sulfentrazone in soils is 541 days (see "Half-life" text box). Microbes and sunlight break down sulfentrazone in the environment. Sulfentrazone's potential to leach to groundwater is high; surface runoff potential is high, and potential for loss on eroded soil is intermediate. The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) Ground Water Advisory - This chemical has properties and characteristics associated with chemicals detected in ground water. This chemical may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.

Fusilade Post-Emergent flowable(applied to the turf)

Banned - sale, use, and distribution of this product in Nassau and Suffolk Counties in the [State of New York is prohibited](#).

Hazardous to Humans and Domestic Animals

Active: [Fluazifop-P-butyl](#) = PFAS

Developmental Toxicity: This product contains a chemical(s) known to cause birth defects

Reproductive Toxicity

Naphthalene is on the Right to Know Hazardous Substance List because it is cited by OSHA, ACGIH, DOT, NIOSH, NTP, DEP, IARC, IRIS, NFPA and EPA. This chemical is on the Special Health Hazard Substance List.

Petroleum Distillates - This chemical is on the Special Health Hazard Substance List Acute Health Effects: The following acute (short-term) health effects may occur immediately or shortly after exposure to Petroleum Distillates: Petroleum Distillates can affect the nervous system causing headache, dizziness, nausea, vomiting, blurred vision, confusion, and loss of balance and coordination. Higher levels may cause coma and death. Chronic Health Effects: The following chronic (long-term) health effects can occur at some time after exposure to Petroleum Distillates and can last for months or years: *Reproductive Hazard:* There is limited evidence that Petroleum Distillates may affect female fertility.

Environmental Hazards - This product is highly toxic to fish and aquatic invertebrates. Do not apply to areas where runoff into water bodies is expected. This product is toxic to grasses and other monocot plants. Minimize exposure to non-target plants and do not apply when weather conditions favor drift from target areas. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters.

[Fusilade](#) - per the label requires notification to workers:

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Do not treat areas while unprotected humans or domestic animals are present in the treatment areas. Do not allow entry into treated areas without protective clothing until sprays have dried.

Written or oral warnings must be given to workers who are expected to be in a treated area or in an area about to be treated with this product. When oral warnings are given, warnings shall be given in a language customarily understood by workers. Oral warnings must be given if there is reason to believe that written warnings cannot be understood by workers. Warnings must include the following information:

CAUTION: Area treated with Fusilade DX Herbicide on (date of application). Do not enter without appropriate protective clothing until sprays have dried. In case of accidental exposure to pesticide spray, wash the skin thoroughly with soap and water. Remove contaminated clothing and wash before reuse. If in eyes, flush with plenty of water. If irritation persists, get medical attention.

*[Revolver](#) Post-Emergent flowable(applied to the turf)

Hazardous to Humans and Domestic Animals

Active: [Foramsulfuron](#)

[Naphthalene](#)

Solvent Naphtha ([petroleum](#))

May be fatal if swallowed and enters airways.

Cancer: Listed as causing cancer

OSHA regulatory status This product is considered hazardous

ENVIRONMENTAL HAZARDS - This product is toxic to non-target plants. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark.

This product has a high potential for runoff after application. Poorly draining soils and soils with shallow water tables are more prone to produce runoff that contains this product. A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential for contamination of water from runoff. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours. Sound erosion control practices will reduce this product's contribution to surface

water contamination.

[Naphthalene](#)

Cancer: Listed as causing cancer

[Sedgehammer](#) Post-Emergent flowable(applied to the turf)

Active: [Halosulfuron-methyl](#)

Hazardous to Humans and Domestic Animals

May damage the unborn child [Danger Reproductive toxicity]

ENVIRONMENTAL HAZARDS - Very toxic to aquatic life, Hazardous to the aquatic environment(acute hazard) Very toxic to aquatic life with long lasting effects (WarningHazardous to the aquatic environment, long-term hazard)

***[Specticle Flo](#)** Pre-Emergent flowable(applied to the turf and hardscapes)

Hazardous to Humans and Domestic Animals

Active: [Indaziflam](#)

Neurotoxin

[S-1,2-Propanediol](#)

Neurotoxin

Reproductive Toxicity

Developmental Toxicity

Very toxic to aquatic life with long lasting effects

[SpeedZone Southern EW](#) Post-Emergent flowable(applied to the turf)

Active: [2,4-D](#)

2,4-D was invented in the chemical boom during World War II, it was one of the two active ingredients in Agent Orange, the notorious Vietnam War defoliant. Scientific studies showing links to [non-Hodgkin's lymphoma](#) in humans (and [Canine Malignant Lymphoma](#) in household dogs),research also shows 2,4-D interferes with several essential hormones, increasing the risks of birth defects and neurologic damage in children.

The journal NeuroToxicology (December 2021) reports that "several neurotoxic pesticide exposures estimated using residential location were [associated with statistically significant increased risk of ALS](#) (amyotrophic lateral sclerosis). Including glyphosate - ALS is a progressive nervous system disease that affects nerve cells in the brain and spinal cord, causing loss of muscle control."

Hazardous to Humans and Domestic Animals

OSHA Regulatory Status - This chemical is considered hazardous by the OSHA Hazard Communication

Cancer: Listed as causing cancer

People and their pets can be exposed to 2,4-D when they play or walk on treated grass. When 2,4-D is applied to lawns people can inhale mist or dust that contains the chemical. It can be carried indoors on shoes or in windblown dust. Once inside, 2,4-D breaks down slowly(if 2,4-D is not exposed to sunlight it can stay active indoors for up to 12 months) and can contaminate the indoor air.

[Dichlorprop-p, 2-ethylhexyl ester](#) - Plant Growth Regulator(PGR)

Male reproductive

Reproductive toxicology

[Dicamba](#)

Cancer: Listed as causing cancer - Peer reviewed study from researchers at the [National Institutes of Health](#) and the [National Cancer Institute](#) have found that use of dicamba can increase the risk of developing numerous cancers, including liver and intrahepatic bile duct cancers, acute and chronic lymphocytic leukemia, and mantle cell lymphoma.

Dicamba is highly volatile and can travel off target for miles, easily evaporating from plant and soil surfaces, and can continue volatilizing days after application. As dicamba herbicides move off their intended application site, they pose threats to [wild plants and the wildlife](#). Loss of native plants and declines in forage quality poses risks to bees and other beneficial insects that rely on pollen and nectar for food. These risks ripple through numerous food webs, including those of birds, which rely on a wide variety of plants and invertebrates for food resources.

[Carfentrazone-ethyl](#)

Very toxic to aquatic life with long lasting effects.

[Manor](#) Post-Emergent flowable(applied to the turf) Active: Metsulfuron Methyl

[Crystalline Silica](#)This material is considered hazardous under the OSHA Hazard Communications Standard

[Developmental toxicity](#)

Hazardous to Humans and Domestic Animals

Cancer: Listed as causing cancer - May cause cancer by inhalation

Endocrine Disruptor

ENVIRONMENTAL HAZARDS - Very toxic to aquatic life, Hazardous to the aquatic environment(acute hazard) Very toxic to aquatic life with long lasting effects (WarningHazardous to the aquatic environment, long-term hazard)

Metsulfuron-methyl, in addition to foliar absorption, metsulfuron-methyl is also rapidly absorbed by plant roots. Because it is systemic, it can move throughout the plant and

accumulate in meristematic tissues. Trees planted in the landscape can have roots that extend well into areas covered with turfgrass, with surface roots co-mingling with turf root systems.

Ranger Pro non-selective flowable, post emergent(glyphosate at 41% = Ranger Pro is a concentrate and per vetted and peer-reviewed research - **Ranger Pro - contains polyethoxylated tallow amine ("POEA") - making Ranger Pro 3,450 times more toxic than glyphosate alone!**

The surfactant co-formulant POEA in the glyphosate-based herbicide RangerPro but not glyphosate alone causes necrosis in Caco-2 and HepG2 human cell lines and ER stress in the ToxTracker assay.

Hazardous to Humans and Domestic Animals

Active: Glyphosate

Neurotoxin

Glyphosate:increases cancer risk by 41%, Researchers from the University of Washington

EPA's now Final Report, glyphosate harms or kills 93% of the plants and animals protected under the Endangered Species Act.

"The EPA's final report did not reach a single "no effects" conclusion for any of the species examined on the impacts of glyphosate." - The National Center for Agricultural Law Center.

The journal NeuroToxicology (December 2021) reports that "several neurotoxic pesticide exposures estimated using residential location were associated with statistically significant increased risk of ALS (amyotrophic lateral sclerosis). Including glyphosate - ALS is a progressive nervous system disease that affects nerve cells in the brain and spinal cord, causing loss of muscle control."

Endocrine Disruptor

INSECTICIDES

Advion granular (Fire Ant Bait)

Hazardous to Humans and Domestic Animals

Active: Indoxacarb

***Topchoice** - Restricted use pesticide(RUP) - not available for purchase or use by the general public. Banned - by the European Union

Active: Fipronil = PFAS

Cancer: Listed as causing cancer

Reproductive Toxicity

Endocrine Disruptor

Very toxic to birds, aquatic life with long lasting effects. Fipronil is highly toxic to bees triggering agitation, seizures, tremors, and paralysis

HHI'S PESTICIDE HAZARD LISTINGS

	CANCER	REPRODUCTIVE TOXICITY	ENDOCRINE DISRUPTOR	NEUROTOXIN	BIRTH DEFECTS
<u>0-0-7 W/ BARRICADE</u>	✓		✓		
<u>CELSIUS WG</u>	✓	✓	✓		✓
<u>DISMISS</u>	✓		✓	✓	✓
<u>FUSILADE</u>	✓	✓		✓	✓
<u>REVOLVER</u>	✓			✓	✓
<u>MANOR</u>	✓	✓	✓	✓	✓
<u>SPECTICLE FLO</u>	✓	✓	✓	✓	✓
<u>SPEEDZONE</u>	✓	✓	✓	✓	
<u>RANGER PRO</u>	✓	✓	✓		✓
<u>TOPCHOICE</u>	✓	✓	✓	✓	✓



WEED & FEED



SELECTIVE



SELECTIVE



SELECTIVE



SELECTIVE



SELECTIVE



SELECTIVE



SELECTIVE



GLYPHOSATE - NON-SELECTIVE



INSECTICIDE



SEDGEHAMMER
MAY DAMAGE
UNBORN CHILD

