UNIVERSAL AGRICULTURAL PEST COMPLEX PROTOCOL: 
Noxious Weeds and Weed Seeds
STAKEHOLDER: Waste Management of Washington, Inc.
LOCATION: State of Washington, Douglas County Greater Wenatchee Regional Landfill and Recycling Facility

ARTICLE I
DEFINITIONS

The following definitions shall be used in the Douglas County, State of Washington Noxious Weeds and Weed Seeds Complex Control Protocol:

“Acceptable Waste”: all Municipal Solid Waste that has been subject to review and approval by the Sub-Committee for stockpiling, land application, processing or disposal within Douglas County, Washington.

“Agricultural Pest”: including not limited to any living stage of an insect, mite, or other arthropod; nematode; slug; snail, or other mollusk; protozoa, or other invertebrate animals; bacteria; fungus; virus; viroid; phytoplasma; weed or parasitic plant; or any organism similar to or allied with any plant pest, or any infectious substance, which can directly or indirectly injure or cause disease or economic damage to any plant or plant product or that threatens the diversity or abundance of native plants.

“Chair”: the Chairperson of the Douglas County Washington, Agricultural Technical Advisory Committee (TAC); a Sub-Committee of the Solid Waste Advisory Committee (SWAC).

“DOE”: the Washington State Department of Ecology or any successor state agency.

“Douglas County”: unincorporated areas of Douglas County, a political subdivision of the State of Washington.

“Exotic”: a pest species or complex which is not endemic or established in the geographic area of interest.

“GWRLF”: the Greater Wenatchee Regional Landfill and Recycling Facility located within Douglas County, Washington.

“Health District”: the Chelan-Douglas Health District or any successor jurisdictional health authority with permitting jurisdiction over the GWRLF or any Intermediate Solid Waste Handling Facility located within Douglas County, Washington.

“Imported Waste”: all “Acceptable Waste” known to have originated from outside Douglas County, Washington.
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“Municipal Solid Waste (hereafter known as MSW)”: a sub-set of Solid Waste as currently defined within Chapter 173-350 (WAC), or as may hereafter be amended.

“Noxious Weeds and Weed Seeds”: a complex of weeds consisting of:
   a) All Class A Weeds Listed by Douglas County, Washington1
   b) Any weeds identified by the Sub-Committee which may pose a substantial threat to the established Agricultural Industry with Douglas County, Washington.2

“Sub-Committee”: the Agricultural TAC sub-committee of SWAC, responsible for: the identification, risk assessment, control procedures and appropriate monitoring methods necessary to control the introduction of Agricultural Pests associated with MSW importation into Douglas County, Washington.

“SWAC”: the Douglas County, Washington, Solid Waste Advisory Committee, established by RCW 70.95.165(3).

“SWPO”: Countywide Solid Waste Program Office, Douglas County, Washington or any successor agency.

“Substantially Equivalent”: a determination that a comprehensive solid waste management program of a state, province, or country provides comparable services to those provided in Washington State. [RCW 70.95.218(2)]3

“TAC”: the Agricultural Technical Advisory Committee; a Sub-Committee of SWAC.

“Unacceptable Waste”: any and all “MSW” that is:
   (a) prohibited from disposal at the GWRLF by federal or state regulations, rule, code, permit, or permit condition, or by jurisdictional health authority; or
   (b) that is prohibited from disposal within Douglas County by the Sub-Committee; or that is a MSW not expressly included in acceptable waste heading as defined above.

“USDA-APHIS”: the United States Department of Agriculture, Animal and Plant Health Inspection Service or any successor federal agency.

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1 Agricultural Pests of Concern species list; submitted to SWAC by Douglas County Agricultural TAC Sub-Committee, accepted on November 4th, 2010, and subject to future updates. March 30-2016, additional weed and seed species were identified as existing in British Columbia and a potential risk of transfer to Douglas County via MSW was determined. Species are listed on the March 30-2016, Douglas County Pests of Concern List.

2 Thirty-seven (37) plant species are listed as Douglas County Class A Weed species and considered Agricultural Pests of Concern by SWAC. March 30, 2016, during review of invasive weeds and seeds in British Columbia, Canada, additional 38 species were added to the Douglas County Pest of Concern list, see Douglas County Pest Complexes List March 30, 2016 for list of species.

ARTICLE II
PURPOSE

The purpose of the Douglas County, State of Washington, Noxious Weeds and Weed Seeds Control Protocol is to: 1) Categorize risk; 2) Determine monitoring, testing, and training to mitigate and record potential risks; 3) Identify potential responses if risk levels are not acceptable or outbreak occurs; and 4) Provide for reasonable protection of the established agricultural industry of Douglas County from the potential establishment of Noxious Weeds and Weed Seeds complexes that may result from the importation and disposal of MSW from any identified source(s) originating from outside Douglas County, State of Washington.

ARTICLE III
NOXIOUS WEEDS AND WEED SEEDS
RISK ASSESSMENT

Identified noxious weed species4 all have some potential to impact the diverse livestock, agriculture, native plant ecology, natural water systems human health, ecologies, landscape, lawns and economies in the Greater Wenatchee area. These complexes are made up of non-native and invasive plant species. Most plant species are non-mobile and must be introduced or transferred from location to location through activities such as human, animal, plant compost, or via the transport of organic waste.5

In general, any transfer avenue, including Municipal Waste trucks, presents an economic risk if noxious weed and seed species are introduced. Therefore, noxious weeds and weed seed transfer via municipal waste transfer vehicles may be a continuous and significant potential risk.

4 Class A species listed by Douglas County Agriculture Pest Sub-Committee include: Buffalobur, Common Crupina, Common Cordgrass, Dense Flower Cordgrass, Salt Meadow Cordgrass, Smooth Cordgrass, Dyers Woad, Eggleaf Spurge, False Brome, Flowering Rush, Garlic Mustard, Giant Hogweed, Goatsrue, European Hawkweed, Yellow Devil Hawkweed, Johanssongrasse, Bighead Knaphweed, Vochn Knaphweed, Kudzu, Meadow Clary, Purple Starthistle, Reed Sweetgrass, Ricefield Bulrush, Clary Sage, Mediterranean Sage, Shiny Geranium, Silverleaf Nightshade, Spanish Broom, Sprue Flax, Syrian Bean-Caper, Texas Blueweed, Italian Thistle, Mild Thistle, Slenderflower Thistle, Variable-Leaf Milfoil, Velvetleaf, and Wild Four O’clock. March 30, 2016 due to a review of invasive weeds and seeds in British Columbia additional 38 species were added to the Douglas County Pest of Concern list, see Douglas County Pest Complexes List March 30, 2016 for list of species.

5 Source: Information specific to plant species was sourced from “Weeds of the West,” 9th edition 2006, publisher The Western Society of Weed Science in cooperation with the Western U.S. Land Grant Universities Cooperatives Extension Services
ARTICLE IV
NOXIOUS WEEDS AND WEED SEEDS
ANTICIPATED PROTOCOL RESULTS

Results from the protocol are anticipated to be a combination of established MSW collection, handling, transporting, and landfill control measures; including sealed transfer canisters, and immediate heavy machinery compaction of municipal waste imported to the GWRLF. The perimeter of the GWRLF will be kept clean of any debris, invasive weeds, and waste material which may harbor pests. Further, WM has implemented a Vegetation Management Plan (VMP) which includes the establishment of native grasses around the perimeter of the GWRLF.

If new sources of waste material are transferred and disposed at the GWRLF from areas with known Noxious Weeds and Weed Seeds, Noxious Weed and Weed Seeds monitoring shall be implemented.

Continued review by local, state and federal authorities of best management practices for Noxious Weeds and Weed Seeds will be undertaken. If contracted experts or the Sub-Committee determines that additional or new management practices are required, these actions shall be implemented.

Implementing these measures will reasonably preclude Noxious Weeds and Weed Seeds species viability and transfer from indentified waste streams.

ARTICLE V
IDENTIFIED WASTE STREAM: MUNICIPAL SOLID WASTE (MSW)

MSW: A subset of solid waste which includes unsegregated garbage, refuse and similar solid waste materials discarded from residential, commercial, institutional and industrial sources and community activities. This material can include residual after recyclables have been separated. MSW does not include dangerous waste other than wastes excluded from the requirements of Chapter 173-303 WAC, Dangerous Waste Regulations, in WAC 173-303-071 such as household hazardous waste; any solid waste, including contaminated soil and debris, resulting from response action taken under section 104 or 106 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (42 U.S.C. 9601), Chapter 70.105D RCW, Hazardous Waste Cleanup—Model Toxic Control Act Chapter 173-340 WAC, the Model Toxic Control Act Cleanup Regulation, or a remedial action taken under those rules; or mixed or segregated recyclables from garbage, refuse and similar solid waste. The residual from source separated recyclables is a MSW.

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6 Transfer trailers are enclosed or tarped and will provide a consistent and secure sealing of the material for transport.
7 See Annex 1 Noxious Weed and Weed Seeds Monitoring Program for more detail
ARTICLE VI
SUBSTANTIAL EQUIVALENT PLAN

Prior to importation of any solid waste into the GWRLF from locations within or outside of the State of Washington, provinces, or countries, WM must provide the SWPO or recognized alternative(s)\(^8\) valid information illustrating the jurisdiction(s), state(s), province(s) or country shipping solid waste to GWRLF have a solid waste reduction, recycling, and management standards “Substantial Equivalent” to those applicable to solid waste generated within the State of Washington.\(^9\)

All solid waste imported to the GWRLF must be in compliance with the State of Washington RCW 70.95.218 and any DOE regulations and guidelines.\(^10\) In the event compliance with the State of Washington RCW 70.95.218 or any DOE regulation or guideline lapses for any solid waste material, the importation of the solid waste shall be suspended until compliance has been reinstated and validated by the DOE.

Upon receiving written notification (email, fax, certified letter, etc.) of any new waste stream location(s) from WM, the SWPO shall have fourteen (14) working days to verify that the proposed imported solid waste is “Substantially Equivalent” and in compliance with RCW 70.95.218 or provide explanation(s) regarding non-compliance.\(^11\) All communication from the SWPO to WM regarding compliance or non-compliance with WM’s “Substantial Equivalent” requests shall be in writing or email correspondence and shall be mutually recognized as a viable means to initiate or suspend any importation of solid waste into the GWRLF.

ARTICLE VII
MUNICIPAL SOLID WASTE (MSW)
COLLECTION CONTROL MEASURES

Collection of MSW: MSW is typically disposed of in plastic bags then placed into covered refuse containers and placed at the curb for collection. In some instances it is placed in larger dumpsters or roll-off boxes which are emptied on a weekly or bi-weekly schedule depending on customer needs and type of material. At this point the MSW is loose and exhibits a density ranging from 150 to 300 pounds per cubic yard.

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\(^8\) The Solid Waste Program Director shall have the discretion to designate and recognized any such person to accommodate the necessary tasks to review and validate information provided by WM.

\(^9\) In accordance to RCW 70.95.218(2): Requires the Department of Ecology to determine if states, provinces, or countries shipping solid waste to Washington have solid waste reduction, recycling, and management standards “substantially equivalent” to those applicable to solid waste generated in Washington State. See Guidelines For Reporting Imported Solid Waste, Washington State Department of Ecology Solid Waste Service Program, Publication #94-140, September 1994.

\(^10\) To validate Solid Waste Management Plans or for a current list of states/provinces/countries that have met RCW 70.95, contact Washington State Department of Ecology

\(^11\) See Washington State RCW 70.95.218 for additional information regarding timelines of notification
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MSW is typically collected in large refuse collection trucks, or roll-off boxes for shipment to a Transfer Station. In the refuse truck, the MSW is compacted to a density of approximately 300 to 750 pounds per cubic yard. Refuse trucks typically contain twenty to thirty yards of compacted MSW.

Further, identified MSW sourced and disposed at the GWRLF may also be transferred lose or compacted by other transfer methods not listed here, including but not limited to rail car, transfer trailers, etc

ARTICLE VIII
HANDLING CONTROL MEASURES

Policy Posting: Facilities accepting waste must post a Waste Acceptance Policy which specifies types of waste material accepted by the facility. Further, as dictated by the DOE and State of Washington RCW 70.95, all WM facilities must comply with existing county specific Solid Waste Management Plan and only import waste material(s) from locations approved by the Sub-Committee.

Collection: Waste material is collected and transferred into transfer trailers at transfer loading facilities or transfer stations. Special Waste, PCS/contaminated soil, Demolition Debris, Medical Waste, are typically loaded into trailer(s) or container(s), are rarely transferred into larger trailers but instead hauled directly to the GWRLF. All containers filled with waste material are sealed or tarped prior to transport.

Vehicle Screening: As vehicles enter the Transfer Stations, drivers are questioned by the scale house attendant and vehicles are visually inspected. In the event any vehicle with unacceptable waste enters the Transfer Stations, the driver is informed about other disposal options and is required to leave the Transfer Station and area. Only vehicles with acceptable waste are weighed, recorded, and directed to the proper area for unloading. Waste is unloaded onto the tipping floor. Only waste material loaded into transfer trailers destined for the GWRLF is allowed.

Tipping Floor Screening: Waste is brought into the Transfer Stations daily and tipped onto the tip floor for pre-sorting. Pre-sorting involves visual screening of the waste material by the equipment operators. If unacceptable waste is detected, it is returned to the owner or transporter, or separated and later disposed at an appropriate facility.

Landfill Disposal: All loads received at the scalehouse must be tarped or sealed. In the event they are not tarped or sealed, vehicles are turned away. Vehicle drivers must provide information regarding area(s) waste material was sourced from, type of waste material, generators name etc. Loads are directed to the active filling or waste disposal area, tipped onto the filling area. After tipped, placed and compacted in daily cell. Waste is covered daily as required by WM Standard Operation Procedures (SOP) or if necessary approved by WM.
ARTICLE IX
MUNICIPAL SOLID WASTE (MSW)
TRANSPORTING CONTROL MEASURES

Transfer/Delivery of MSW: Most MSW is compacted into tarp covered trucks or transfer trailers, rail cars, etc. All transfer trailers, rail cars, etc. will be fully enclosed and provide a consistent and secure sealing of the material to the GWRLF. Compaction density within a transfer trailer is approximately 750 to 1,000 pounds per cubic yard. Transfer trailers typically contain 90 to 100 yards of MSW. Rail cars and other means of transfer may have similar densities of MSW. All material is weighted prior to disposal at the GWRLF.

ARTICLE X
LANDFILL CONTROL MEASURES

Landfill Densities: All MSW is tipped from the transfer trailers onto the ground at the active face of the GWRLF. All MSW is spread out into 12 to 18 inch lifts where a 100,000 pound compactor makes a minimum of three passes over the material to compact it. Final MSW densities are typically 1,740 pounds per cubic yard.

Daily Cover: At the conclusion of every workday, a cover is applied over the compacted MSW. Cover typically consists of 6 inches of soil material or a Health District approved alternative daily cover, such as a heavy-duty tarp. WM shall periodically monitor the depth of the daily cover to assure the depths meet, or exceed, 6 inches.

Internal Heat/Oxygen Conditions: The GWRLF, which is built in layers, generates internal heat and gases. WM shall periodically monitor the heat and oxygen content condition of the MSW disposed of within the GWRLF.

ARTICLE XI
PEST PREVENTION CONTROL MEASURES

Preventive Pest Control: When disposing of waste streams that are sourced from areas with no known invasive populations of Noxious Weeds and Weed Seeds preventive Standard Operation Procedures (SOP) for all WM transport, regardless of transport method, must be followed. SOPs require all loads be capped, wrapped, tarped or otherwise contained entirely. Once loaded, all transport vehicles travel directly to the GWRLF. With these standard management procedures, risks with most waste transport pathways will be very low, especially given existing mitigations stated below.

All areas around the GWRLF must be kept clean of debris and monitored for Pests of Concern if and when Pests of Concern are identified as potential contaminant risk of the waste stream transported to the GWRLF. In the event Pests of Concern are found, necessary chemical, cultural, mechanical, biological measures will be implemented to prevent pest establishment, or to mitigate and control these pest populations.
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**Daily Cover:** GWRLF mitigation will involve multiple-layering, compaction, and capping of dumped MSW with a 6-inch soil cover, tarps or approved Alternate Daily Cover (ADC) at the conclusion of each workday. GWRLF shall periodically monitor the depth of the daily soil cover, when used, to assure the depths meet, or exceed, 6 inches. Although the risk pest introduction by normal collection and disposal practices is considered very low, any changes of policy or practice such as illegal dumping or disposal at GWRLF will increase the risk.

**Internal Heat/Oxygen Conditions:** The GWRLF, which is composed of multiple layers of compacted waste added over time, generates internal heat and gases as the waste decomposes. WM shall periodically monitor the heat and oxygen content condition of the MSW disposed of within the GWRLF.

**ARTICLE XII**

**AGRICULTURAL PEST MONITORING PROGRAM**

**Monitoring Program:** If new waste streams are transferred and disposed at the GWRLF from sources with known Noxious Weeds and Weed Seeds, WM shall establish and maintain a Noxious Weeds and Weed Seeds monitoring program. The oversight of this monitoring program shall be through an independent third party who is a Sub-Committee approved professional Consultant.

If detection of any Noxious Weeds and Weed Seeds are observed by any persons, and are believed to pose a significant risk to the established agricultural industry, WM shall be notified immediately and has three calendar days to notify the Chair of the detection, identification, location and potential threat level to the established agricultural industry.

If Noxious Weeds and Weed Seed material is observed, and control is deemed necessary, appropriate control measures will be requested and implemented. These measures may include but are not limited to: application of labeled pesticide material by certified applicator to all areas in the GWRLF vicinity.

**ARTICLE XIII**

**PROTOCOL REPORTING PROGRAM**

**Noxious Weeds and Weed Seeds Monitoring Report:** If monitoring program is implemented, the Sub-Committee approved Professional Consultant shall prepare an annual Noxious Weeds and Weed Seeds Monitoring Report and submit it to the Chair by

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12 See Annex 1 Weed Noxious Weeds and Weed Seeds Monitoring Program for more detail.
13 Prior to the weed management season, a consultant to implement the monitoring and weed management program must be selected by WM and approved by the Sub-Committee.
14 If a decision is made to treat an area, a method or a combination of methods will be selected based on potential effects to human health, environmental considerations, and effectiveness of the product to control the identified weed.
15 Only pesticides, herbicides, biological, etc. technologies labeled or approved in Washington State will be used. All labeled instructions must be implemented by approved and/or licensed applicator/individual.
September 30th of each year. This *Noxious Weeds and Weed Seeds Monitoring Report* shall contain the following information at a minimum:

a) Name of the Consultant;
b) Address of the Consultant;
c) Business phone of the Consultant;
d) Monitoring dates of the monitoring program;
e) Map of the GWRLF showing the location(s) of the Noxious Weeds and Weed Seeds monitoring program;
f) Brief explanation of the purpose of the Noxious Weeds and Weed Seeds monitoring program;
g) Brief explanation of the monitoring method(s) utilized in the Noxious Weeds and Weed Seeds monitoring program;
h) Results of the Noxious Weeds and Weed Seeds monitoring program;
i) Professional summary of the outcomes of the Noxious Weeds and Weed Seeds monitoring program;
j) Suggested changes or additions to the Noxious Weeds and Weed Seeds monitoring program for the upcoming year.

Noxious Weeds and Weed Seeds Annual Report: If monitoring program is implemented, WM shall prepare an annual report and submit it to the Chair by September 30th of each year. This *Noxious Weeds and Weed Seeds Annual Report* shall contain the following information at a minimum:

a) Name of the GWRLF;
b) Address of the GWRLF;
c) Business phone and contact person at the GWRLF;
d) Identity of importing jurisdictions;
e) Types of Imported Waste disposed of at the GWRLF;
f) Data sheet documenting the heat and oxygen content conditions at the GWRLF when applicable;
g) Suggested changes or additions to the Landfill Control Measures for the upcoming year;
h) Any additional information requested by the Chair specific to the effectiveness of this Protocol.