

Soil Fumigation Pre-Application Checklist

Items	Status	
	Yes	No
Applicator Licensing and Certification		
• Annual pesticide license renewal fee has been paid and validity of the license has been verified.		
• Certification		
<ul style="list-style-type: none"> ▪ WSDA Soil Fumigation RMM endorsement OR Achieva certification is current for each active ingredient being used (three-year renewal cycle).¹ ▪ Received label-required fumigant safe handling information within the past 12 months.¹ ▪ Commercial Applicators only <ul style="list-style-type: none"> ▶ Commercial Operators are listed with WSDA under the Commercial Applicator's license. 		
¹ Requirements do not apply to Telone II or to Telone EC.		
Shank Applications		
• Application Apparatus		
<ul style="list-style-type: none"> ▪ Dry disconnects installed on transfer hose at all break points from supply tank to shank apparatus. (As an alternative, break points can be "hard plumbed.") ▪ Equipment in good repair (no leaks or broken parts). ▪ Commercial Applications only (refer to WSDA AGR Form 702-4242): <ul style="list-style-type: none"> ▶ Apparatus is registered with commercial applicator's license. ▶ WSDA apparatus plate with current year sticker is attached to the apparatus. 		
• Field Storage Tanks		
<ul style="list-style-type: none"> ▪ Currently registered label with EPA Establishment Number attached in prominent location & legible. ▪ Tank labeling information must appear on each tank.¹ <ul style="list-style-type: none"> ▶ National Fire Prevention Association placard (fire diamond) – verify with the product's SDS ▶ Owner's name ▶ Identifying number ▶ Tank capacity ▶ Date of container placement sealed in a weather-proof enclosure 		
¹ Lettering must be a minimum of 2 inches in height and in a color contrasting to the background.		
Chemigation Applications (Only applies to Telone EC and to metam sodium and metam potassium products)		
• Backflow devices properly installed and functional.		
<ul style="list-style-type: none"> ▪ Irrigation mainline check valve ▪ Vacuum relief valve ▪ Inspection port ▪ Low pressure drain 		
• Injection system devices installed and functional.		
<ul style="list-style-type: none"> ▪ Injection line check valve with at least a 10 psi spring ▪ System interlock operational (electrical, flow meter, pressure switch) ▪ Injection pump <ul style="list-style-type: none"> ▶ Calibrated ▶ Commercial applications only: WSDA plate attached with current year sticker 		
• Application Tank		
<ul style="list-style-type: none"> ▪ Currently registered product label attached to each tank. ▪ Appropriate EPA Establishment Number (Registrant or Dealership) displayed on each tank. 		

Items	Status	
	Yes	No
• Application Tank (cont.)		
▪ Identification information in contrasting color to the background (2-inch minimum height)		
▶ Contact name		
▶ Contact phone number		
▶ Unique identifier		
▶ Volume of contents (generally imprinted onto tank at time of molding)		
Fumigant Management Plan (Does not apply to Telone II or Telone EC)		
• Completed before the start of the application, and signed and dated by the Applicator-in-Charge.		
• Emergency response plan completed with contact names and phone numbers. Site map with features.		
• Atmospheric inversion events and air stagnation advisories assessed. Response information provided.		
Personal Protection Equipment, including Respirators		
• Chemical-resistant protective clothing provided – cleaned and inspected after each day of use		
▪ Long-sleeve shirt and long pants ^{1,2,3}		
▪ Coveralls with apron or chemical-resistant suit ¹		
▪ Shoes plus socks ^{1,2,3}		
▪ Rubber boots or boot covers, or other chemical-resistant footwear ¹		
▪ Chemical resistant gloves ¹		
▪ Protective eyewear (non-venting goggles, face shield, or full-face respirator) ^{1,3}		
• Respirator (Refer to “Precautionary Statements - Personal Protection Equipment” section of the pesticide label)		
▪ Handler assessment		
▶ Medical evaluation has been performed by a licensed health care provider		
▶ Respirator fit-testing and training performed annually		
▪ Respirator use		
▶ Organic vapor cartridges replaced after each day’s work period.		
▶ Seal check is performed each time respirator is donned.		
▶ Respirator cleaned and inspected after each day’s use.		
▶ Respirator placed into a sealable container and kept separate from contaminated PPE.		
▪ Respiratory Protection Program prepared and implemented, Program Administrator designated.		
¹ Transferring or loading product, repairing or inactivating irrigation or chemigation equipment during application, cleaning up spills or equipment, and operating tractors with open cabs.		
² Tractor operators in closed cabs.		
³ Set-up and calibrate chemigation and irrigation equipment and starting the application within the application block.		
Air Monitoring Device (Does not apply to Telone II or Telone EC)		
• Direct read detection device (e.g., Draeger, Sensidyne) to monitor air concentration levels		
▪ Air monitoring device available		
▪ A pesticide handler is trained in use of the detection device.		
• Colorimetric detection tubes		
▪ Appropriate sensitivity to detect threshold level for soil fumigant being applied.		
▪ Tubes have not exceeded the expiration date printed on the box.		
Field Signage		
• General guidelines		
▪ Placed no sooner than 24-hours prior to the start of the application.		
▪ Signage must be removed within 48-hours of the end of the posting period.		
▪ Signage must remain legible throughout the posting timeframe.		
▪ Minimum size of lettering is at least 1 inch in height.		
▪ Name of Applicator-in-Charge appears on buffer zone & application block signs (except Telone II).		

Items	Status	
	Yes	No
Buffer Zone Notification and Exclusionary Restrictions (Does not apply to Telone II or Telone EC)		
• Structures under the control of the owner or renter/lessee of application block ¹		
▪ Buildings used for storage (sheds, barns, garages) cannot be occupied during buffer zone period.		
• Areas not under control of owner or operator of application block (letter of agreement required and must voluntarily leave) ¹		
▪ Residential areas (employee housing, private property)		
▪ Publicly owned and/or operated areas (parks, sidewalks, permanent walking paths, playgrounds, and athletic fields)		
▪ Commercial and industrial buildings		
▪ Outdoor residential areas (lawns, gardens, and play areas)		
▪ Other areas that people may occupy (parks, golf courses, playgrounds, athletic fields, permanent walking trails, sidewalks, and bus stops)		
▪ Agricultural areas owned and/or operated by persons other than owner or renter/lessee owner of the application block		
▪ Adjoining fields with active buffer zones (exemption for low release height-solid stream systems)		
• Roadways (exemption for vehicular and bicycle transit) and rights-of-way and public transit		
• Difficult-to-evacuate site (fumigant application setback distance from application block is based on size of buffer zone). ²		
▪ Pre-K to grade 12 schools, state licensed daycare centers, nursing homes, assisted living facilities, hospitals, in-patient clinics, and prisons		
¹ During the application and for the 48-hour period after completion of the application.		
² During the application and for the 36-hour period after completion of the application.		
Worker Protection Standard		
Notification (soil fumigant labels require that both oral notification and field posting must occur) ¹		
▪ Central Posting Area (where workers & handlers are likely to pass by or congregate and where can be easily seen)		
▶ Pesticide safety information is displayed.		
▶ Pesticide-specific application information is listed along with SDS(s).		
▪ Oral Notification ¹		
▶ Provided to agricultural workers on the farm before the application takes place OR		
▶ At the beginning of their first work period if application is still occurring or ERP is still in effect		
▪ Information Exchange (must occur before a soil fumigant application takes place; WSDA template is available.)		
▶ Commercial applicator notifies client of the pesticide being applied.		
▪ Elements: Location and description of area to be treated, complete product name, EPA registration number, active ingredient(s), application date(s) and start and estimated end time, REI/ERP interval, PPE requirements for pesticide handlers and early-entry workers during or after application, and whether both posting and oral notification are required.		
▶ Farm operator notifies commercial pesticide company about the pesticide being applied		
▪ Elements: Location and description of area under a REI/ERP and restrictions on entering those areas, such as PPE requirement for pesticide handlers and early-entry workers.		
• Decontamination supplies for pesticide handlers (Refer to WSDA AGR PUB 706-465 for detailed information)		
Maintain an emergency decontamination site within ¼-mile of pesticide handlers and establish a decontamination site at mixing and loading sites that include the following:		
▪ If the pesticide label requires protective eyewear, provide:		
▶ each pesticide handler with at least 1 pint of emergency eyeflush, which must be immediately available.		
▶ Emergency eyewash at PPE decon site and at the mix/load site (if at separate locations).		
▪ Plumbed or portable eyewash station delivers at least 0.4 gallons of water per minute for 15 minutes (6 gallons total) and is capable of irrigating both eyes simultaneously		
▪ Sufficient water for routine washing		
¹ Worker- or handler-employer is ultimately responsible for oral notification and posting information to central posting area.		

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Worker Protection Standard (cont.)		
<ul style="list-style-type: none"> ▪ Enough water for washing the entire body in case of an emergency <ul style="list-style-type: none"> ▶ Minimum of 10 gallons of water for one employee or 20 gallons for two or more employees ▪ Soap and single-use (disposable) towels (e.g., paper towels) ▪ Clean change of clothes (e.g., coveralls, Tyvek suit) 		
Where pesticide handlers <u>remove their protective clothing</u> (if a different location than the mixing and loading site), provide at least: <ul style="list-style-type: none"> ▶ Minimum of 10 gallons of water for one employee or 20 gallons for two or more employees ▶ Soap and clean, single-use (disposable) towels 		
• Pesticide handler training (access onto application block and into buffer zone)		
<ul style="list-style-type: none"> ▪ Training conducted annually using EPA-approved training materials ▪ Only properly trained & equipped handlers are allowed into buffer zone and onto application block 		
Safety and Spill Response Information		
Nature of Emergency	Phone Numbers	
Emergency Medical Treatment Information		
National Poison Control Center (caller will be forwarded to regional center for the calling area)	1-800-222-1222	
Product Usage Information		
AMVAC Chemical Corporation (Medical Emergencies: 1-888-681-4261)	1-888-462-6822	
Soil Chemicals Corporation (d.b.a., Cardinal Professional Products)	1-800-424-9300	
Teleos Ag Solutions	1-800-424-9300	
Taminco, Incorporated	1-800-223-3258	
TKI NovaSource, Incorporated (Emergency Contact: 1-866-374-1975)	1-866-374-1975	
Trident Agricultural Products, Incorporated	1-800-424-9300	
Spills		
<p>The following TWO (2) 24-hour numbers must be called or in the event of a pesticide spill:</p> <p>1) Washington State Emergency Management Division (EMD): (EMD may be called instead of the regional Ecology offices, which are listed below.)</p> <ul style="list-style-type: none"> • EMD or Ecology MUST be contacted <ul style="list-style-type: none"> ▶ if oil or a hazardous substance threatens to enter or has entered water of the state OR ▶ pesticide spills of any quantity that threatens human health or the environment. <p>AND</p> <p>2) National Response Center (NRC)</p> <ul style="list-style-type: none"> • NRC MUST be notified when <ul style="list-style-type: none"> ▶ a reportable quantity of a hazardous substance is released – Refer to SDS (Safety Data Sheet, formerly, MSDS), Section 15: Regulatory Information (Emergency Planning and Community Right-to-Know Act [CERCLA] Section 103 - Reportable Quantity, RQ) <p>OR</p> <ul style="list-style-type: none"> ▶ any quantity of oil or hazardous substance enters any water of the state. 	1-800-258-5990	1-800-424-8802
Basic Spill Emergency Procedures		
<ul style="list-style-type: none"> • Control the Site Secure site & control access. Care for injured. Render basic first aid. Seek medical assistance, if needed. Determine pesticide(s) involved. Prior to entering a contaminated area, don appropriate personal protection equipment (PPE). • Contain the Spill (as much as possible at site of the spill, given level of training and available resources) Wear appropriate PPE. Prevent further leakage or prevent from spreading. Divert flow from sensitive areas. • Cleanup and Decontamination Wear suitable PPE. Refer to SDS, Sections 5 & 6 for response measures, safety and precautionary procedures. • Contact (reporting of spill and notifying proper authorities, if warranted). Be prepared to report on: Who is reporting, location of spill, what and how much spilled, damages incurred, and cleanup procedures taken. 		
Transportation (Roadway) Emergencies		
CHEMTREC (Leaks, spill, fire, exposure, or accident)	800-262-8200	
Washington State Patrol or County Sheriff Department	9-1-1	