

Testimony Before the Marion County Planning Commission

Conditional Use Case CU26-020

Good evening, Chair and Members of the Planning Commission.

My name is Mark Akimoff; I live and work at 7645 Sunnyside RD, SE Salem, OR. I operate a specialty farm and nursery immediately to the South and West of the proposed dustless blasting operation.

My property is an active agricultural operation where I grow cherries, figs, plums, vegetables, flower bulbs, cut flowers and nursery stock. These crops are sold directly to the public and depend upon clean air, clean growing conditions, and consumer confidence. Because of that, I am concerned that the proposed use has not been shown to be compatible with the surrounding agricultural and residential neighborhood as required by Marion County Code.

I would like to focus my comments on the approval criteria rather than on whether this is a desirable business.

The issue before the Commission is not whether automobile paint removal is an acceptable business somewhere else. The issue is whether this applicant has demonstrated, with substantial evidence, that this particular operation satisfies the Conditional Use and Home Occupation criteria contained in Marion County Code.

I respectfully believe the record does not yet contain that evidence.

Air Quality – MCC 17.128.040(D)

The staff report concludes that the proposal will not have a significant adverse impact on air quality because the applicant submitted a hazardous waste determination showing that the spent blasting media is not classified as hazardous waste using the TCLP method.

However, the TCLP is a landfill disposal test, not an inhalation or ingestion hazard test.

It evaluates whether waste placed into a landfill is likely to leach contaminants into groundwater. It is not an air quality study. It is not an inhalation study. It is not a particulate dispersion study. It does not evaluate whether blasting residue can become airborne and migrate onto neighboring agricultural properties.

In fact, the laboratory report submitted by the applicant identifies measurable concentrations of lead, chromium, cadmium, and barium in the spent blasting media. None of those heavy metals are safe to breathe in and the report does not conclude that the material is safe if it becomes airborne or settles on neighboring properties. I have

videos of dust plumes leaving the business property that I would like this commission to review. The videos and pictures I am presenting here show both the wet slurry producing vapor clouds that drift offsite onto neighboring properties as well as the dry material being moved with a leaf blower and then stockpiled where it can further be blown by the wind.

The application contains no particulate dispersion study, no PM10 or PM2.5 analysis, no deposition study, and no independent evidence demonstrating that blasting residue will remain entirely on the applicant's property under normal operating conditions.

I have personally observed and recorded video showing blasting dust leaving the property during blasting operations. I intend to submit those videos into the record. I have them here on DVD and on a thumb drive.

Public and Private Nuisance – MCC 17.120.075(B)

The Marion County Code requires that a home occupation be continuously conducted in a manner that does not create a public or private nuisance, including offensive noise, vibration, fumes, smoke, or similar impacts.

The staff report concludes that this criterion is met because Code Enforcement listened to the operation from around the property and believed the noise was comparable to lawn mowers and leaf blowers.

Respectfully, I do not believe that subjective observation constitutes substantial evidence.

The record contains no independent acoustical study.

There are no measured sound levels.

There is no analysis demonstrating compliance with applicable noise standards.

There is no evaluation of cumulative noise from the industrial air compressor, blasting equipment, and associated operations over the course of a workday.

Without objective evidence, I do not believe the applicant has demonstrated that this operation will not create a nuisance as required by the Marion County Code.

Compatibility With Neighboring Uses – MCC 17.120.075(C)

This criterion may be the most important.

that the proposed use will not create a nuisance, will not adversely affect air quality, and will not significantly interfere with neighboring uses.

I do not believe that burden has yet been met.

Requested Action

For these reasons, I respectfully request that the Planning Commission either deny the application or continue the hearing until the applicant provides objective evidence addressing these unanswered questions, including:

An independent air quality and particulate dispersion analysis demonstrating that blasting residue will not migrate off site.

An independent acoustical study demonstrating compliance with applicable noise standards at neighboring property lines.

An evaluation of compatibility with adjacent agricultural uses, including food crops and commercial nursery production.

Appropriate operating conditions to ensure that neighboring agricultural properties are protected from dust and noise impacts.

In closing, I want to emphasize that I am not opposed to home-based businesses.

I support responsible small businesses.

However, the Marion County Code requires more than good intentions.

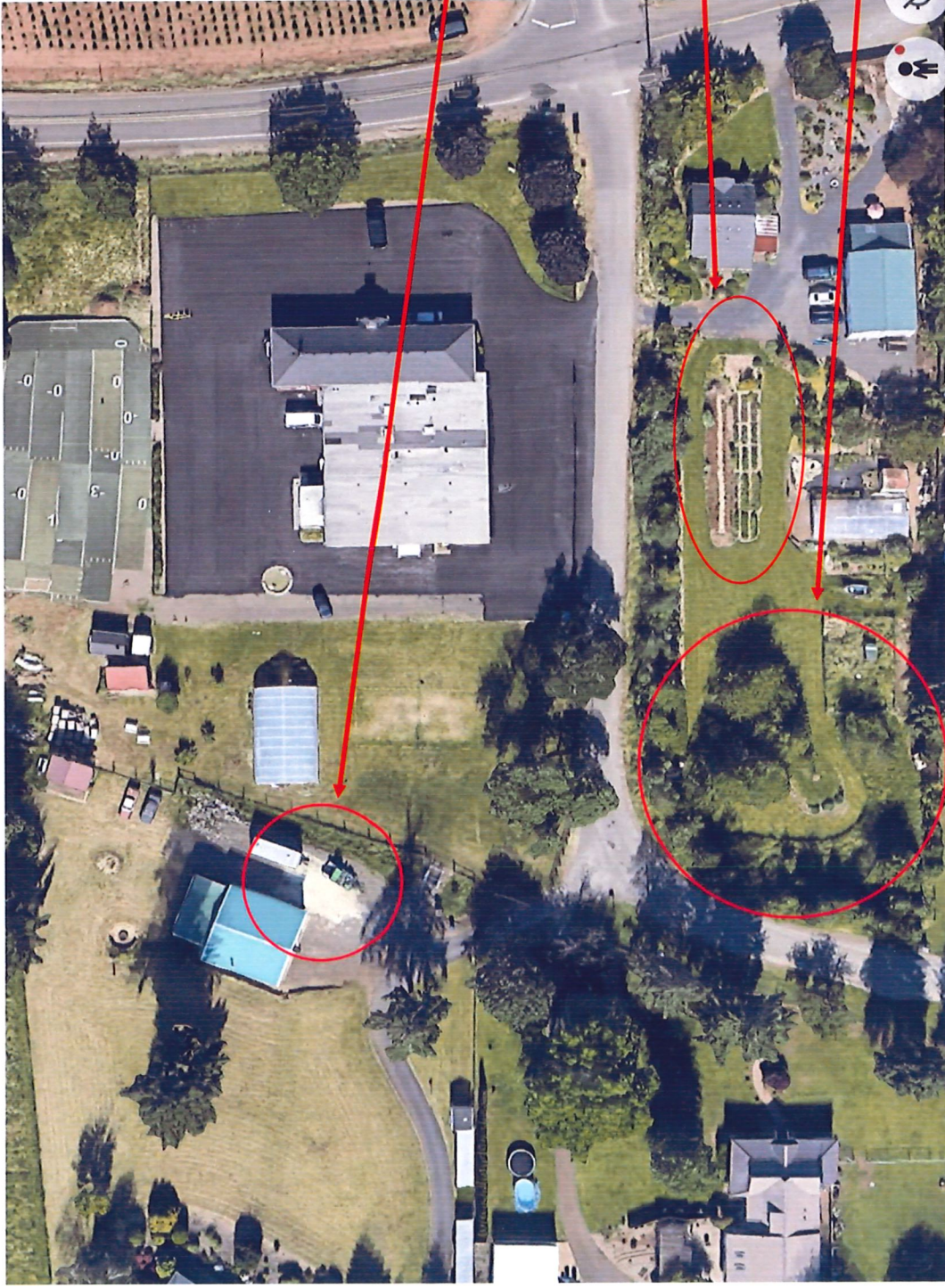
It requires evidence demonstrating that a proposed home occupation is compatible with surrounding properties and can operate without creating significant adverse impacts.

Based upon the evidence currently in the record, I respectfully do not believe those findings can yet be made. Thank you for your time and consideration.

Our farm



The property at 7645 Sunnyside Road SE lies within the historic Jory Hills agricultural landscape south of Salem. The area takes its name from the pioneering Jory family, who settled here in 1852, and from the distinctive Jory soil series that blankets the surrounding hillsides. These deep, well-drained volcanic soils have long been recognized as among the Willamette Valley's most productive agricultural soils and have supported generations of orchards, berries, vineyards, and other specialty crops. During the late nineteenth and early twentieth centuries, the hills south of Salem became nationally known for fruit production, particularly cherries. The surrounding hills were considered ideal for orchard cultivation, contributing to Salem's designation as the "Cherry City" in 1907. Historic orchards once occupied much of the landscape surrounding the subject property before portions of the area gradually transitioned to rural residential development. Even today, active farming and orchards remain an important component of the neighborhood's rural character. This historic context demonstrates that orchard agriculture and specialty crop production are longstanding, compatible land uses within the Jory Hills area and form an important part of the area's agricultural heritage

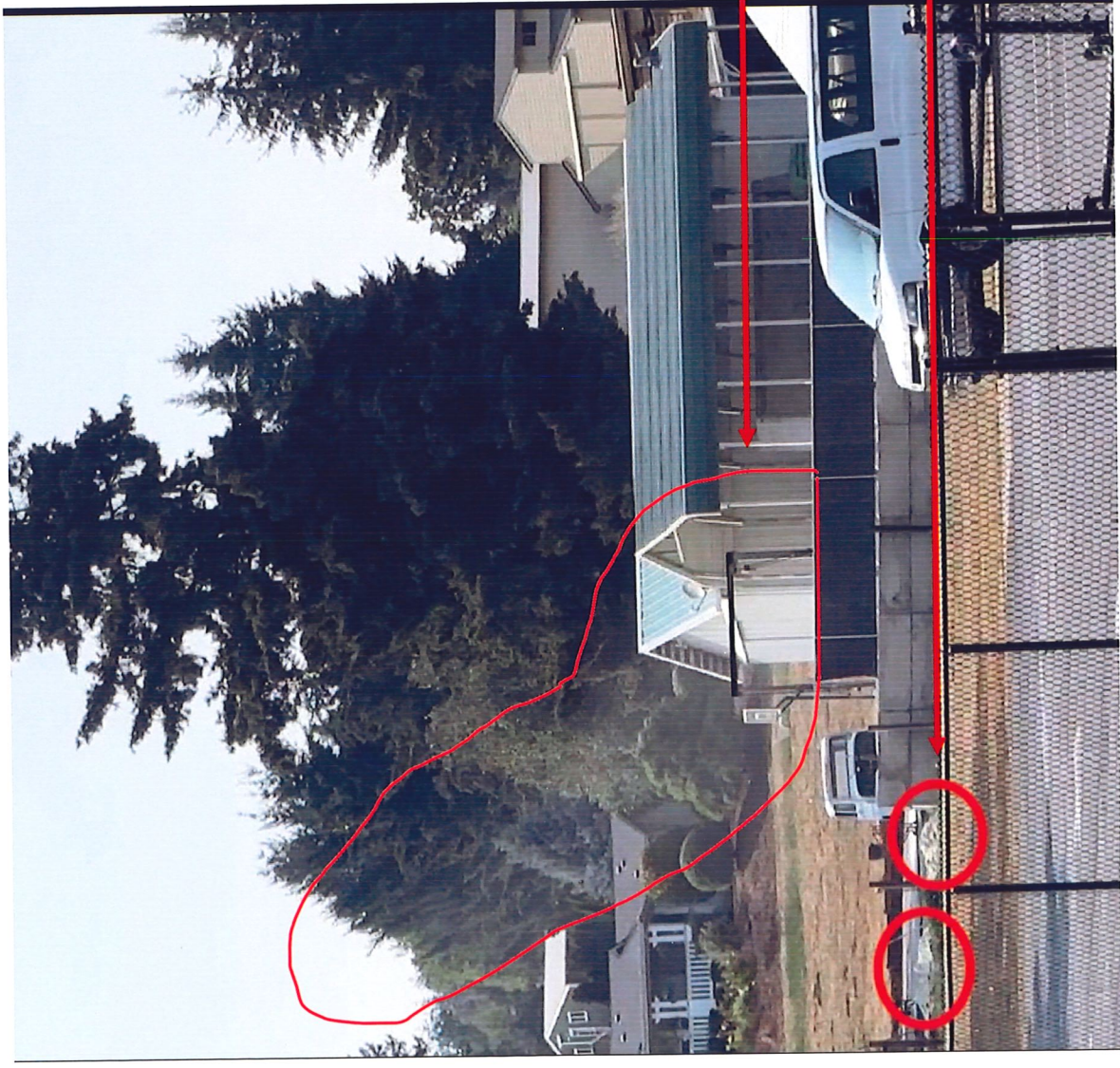


Satellite image showing proximity of blasting operation to food production with spent blasting media visible from space

Blasting area, now covered but open-air blasting shed.

Vegetable and cut flower production 250' from blasting

Royal Ann Cherries, Tart pie pollinators, Conadria figs. 156' feet from blasting operation



This picture is a still capture from video showing dust plumes rising 25' or more into the air from the open-air blasting shed and drifting towards our farm. It also shows spent media piles laying uncovered on the ground causing dry material to be spread containing heavy metals.

Dust plume moving offsite to the south towards our farm and other residences.

Piles of spent crushed glass blasting media left to blow in the wind.

Personal protective Equipment required to operate this machine

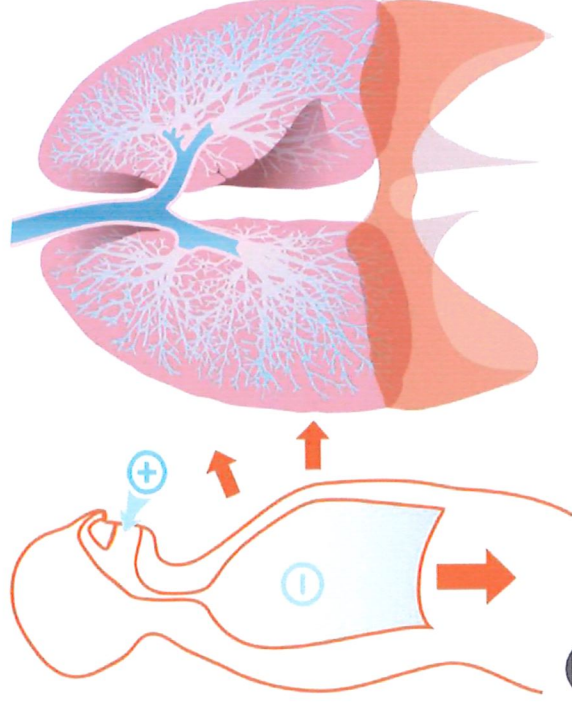
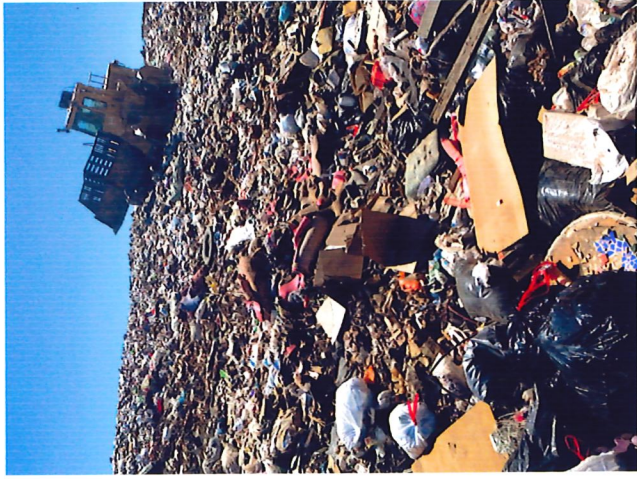


The applicant has emphasized that the DB500 is a "dustless" blasting system. However, the manufacturer's own operating instructions require operators to wear extensive personal protective equipment, including a supplied-air blasting helmet or appropriate respiratory protection, hearing protection, eye and face protection, heavy gloves, and protective clothing. These requirements exist because abrasive blasting generates high-energy particles, airborne mist, paint debris, and noise capable of causing injury or harmful exposure to workers in the immediate blasting area.

This is straight from the manufacturer of the machine and it proves the point that whatever coming out of the blasting shed and onto our property does pose a risk to our health and our crops.

Hazardous Material Versus Toxic Material

- The TCLIP test that was submitted with this application is for disposal in a landfill not for human exposure or breathing. This material is toxic if inhaled or ingested.



TCLIP Results vs. RCRA Hazardous Waste Threshold			
RCRA 8 Metal	Rolls Royce (mg/L)	General (mg/L)	RCRA HW Threshold (mg/L)
Arsenic	ND (0.00500)	ND (0.00500)	5.0
Barium	2.84	2.87	100.0
Cadmium	0.00826	0.0380	1.0
Chromium	0.160	0.0378	5.0
Lead	1.54	2.11	5.0
Mercury	ND (0.000500)	ND (0.000500)	0.2
Selenium	ND (0.0500)	ND (0.0500)	1.0
Silver	ND (0.00500)	ND (0.00500)	5.0

ND = non-detect above the respective method detection limit (MDL)



Ok to put here



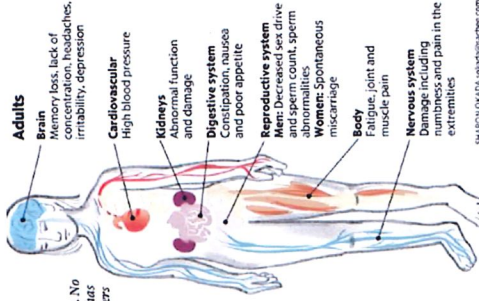
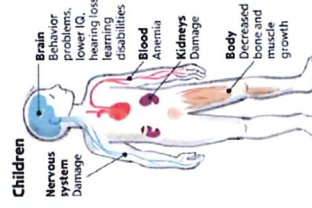
Not ok to put here

Toxicity of the dust produced by the DB500

Lead dust

Lead exposure

Although often without obvious symptoms, lead exposure can affect nearly every part of the human body. No safe level of lead in the bloodstream has been determined by the federal Centers for Disease Control and Prevention.



SOURCE: OSHA, safetyspace.com

SOURCE: Centers for Disease Control and Prevention, National Institutes of Health

Cadmium dust:



Substance Attributes

Known Human Carcinogen

This is a serious nasty substance. Exposure to this substance leads to cancer in Humans. Exercise extreme caution with this substance, explore your exposure routes and seriously consider complete avoidance. See further details under Toxins.

Carcinogenic Properties

Accumulating evidence points to cancer potential. Exercise caution with this substance, explore your exposure routes and consider complete avoidance. See further details under Toxins.

Endocrine Disrupter

Interferes with your hormones. Hormones are powerful messengers that can lead to DNA. You don't want to mess with them.

Mutagenic Properties

Causes mutations to genetic material like DNA, RNA or mitochondrial DNA

Reproductive Effects

Interferes with fertility

Birth/Developmental

Known to affect development of fetus.

Chromium Dust:

Chromium toxicological hazards to human

Hepatotoxic effects:
reduced viability and induced apoptosis of human liver cells (HepG2), significant liver damage

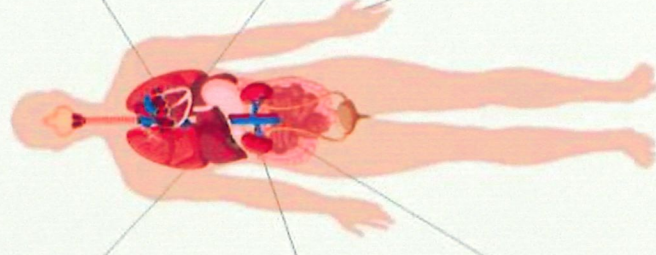
Nephrotoxic effects:
tubular dysfunction, decline in glomerular filtration rate, renal failure

Gastrointestinal tract effects:
gastrointestinal problems, weight loss, change the variety and composition of the gut microbes

Respiratory effects:
tract inflammation, airway blockage, and lung, nasal, or sinus cancer

Hematological effects:
iron deficiency anemia, increase in erythrocyte membrane fragility, apoptosis in human lymphocytes

Dermal effects:
allergic skin responses, hypersensitivity, skin ulcers and hair disorders, hair loss



Blasting plume going up
20' and starting to drift
towards the ball field
and playground at the
church.





2021 aerial image
with no crushed
glass and lead
dust on the
pavement

Source: Marion
County GIS



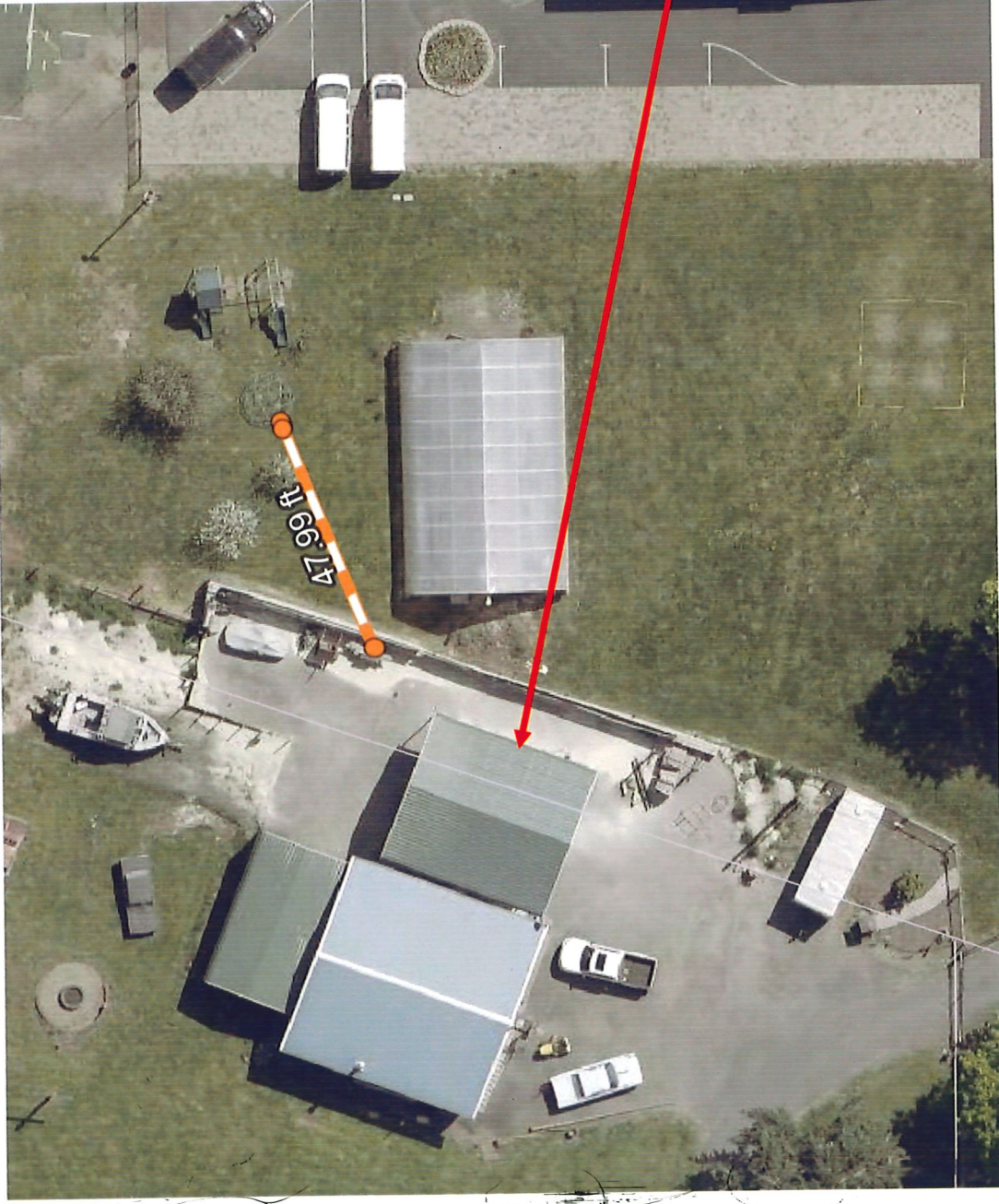
From OSHA CFR for Abrasive Blasting operations

1926.57(f)(7)

Operational procedures and general safety. Dust shall not be permitted to accumulate on the floor or on ledges outside of an abrasive-blasting enclosure, and dust spills shall be cleaned up promptly

Dust from blasting left on bare pavement

Potential for Wind dispersal of Blasting Residue. This photograph shows dry blasting residue remaining exposed on paved surfaces after blasting operations. The DB500 manufacturer's instructions direct operators to capture blasting byproducts and properly collect spent abrasive following blasting. In contrast, exposed deposits of dried blasting media remain available for wind dispersal. Weather records from the Salem area show that the Delaney Road/Jackson Hill vicinity experiences routine afternoon winds, with average wind speeds commonly ranging from approximately 4 to 8 mph and periodic gusts exceeding 20 mph. Under these conditions, fine blasting residue left exposed on pavement may be transported by wind or by subsequent mechanical disturbance, increasing the potential for off-site migration onto neighboring properties. Source: Marion County GIS 2023 Aerial. Prior to open air blasting shed.



Blasting residue on bare pavement 48' from a kids play structure.

Source: Marion County GIS 2025 aerial

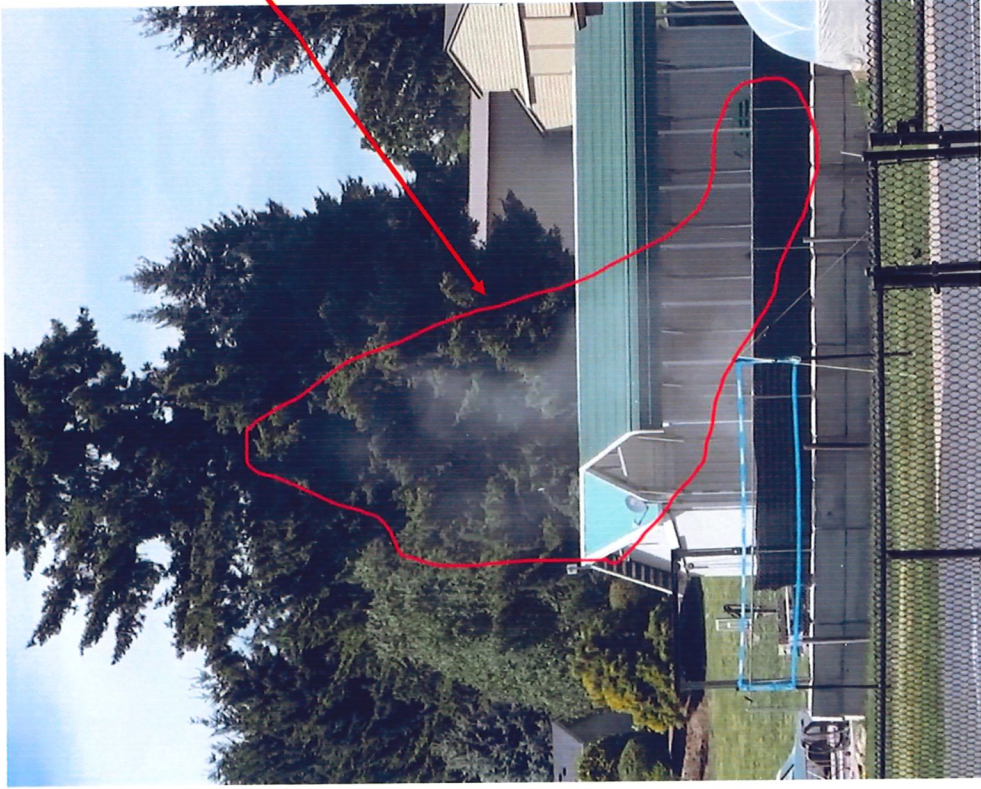
Open air blasting shed does not contain the blast media. Blasting Residue Remaining on the Site After Operations. This aerial photograph from 2024 shows visible accumulations of dry blasting residue remaining on the pavement following abrasive blasting operations. The DB500 manufacturer's operating instructions direct operators to "capture the blasting byproducts using a heavy tarp" for efficient containment and instruct that spent abrasive and removed coating material be collected and properly disposed of after blasting. The presence of exposed piles of dry residue on bare pavement indicates that blasting byproducts were not fully contained or removed as recommended by the manufacturer, leaving fine particulate material available for re-entrainment by wind or mechanical disturbance.

"OSHA's abrasive blasting regulations recognize that spent abrasive and dust must be contained rather than allowed to migrate. OSHA requires dust collectors to be configured so accumulated dust can be removed without contaminating other work areas (29 CFR § 1926.57(f)(4)(iii)), prohibits dust from accumulating outside abrasive blasting enclosures and requires dust spills to be cleaned up promptly (§ 1926.57(f)(7)), and requires blast enclosures to minimize the escape of abrasive and dust particles (§ 1926.57(f)(3)(i)(A)). These provisions reflect the accepted engineering practice that abrasive blasting residue should be contained and recovered rather than dispersed beyond the work area."



Spent media piled up
Outside of the work
area

Compatible use in the neighborhood?



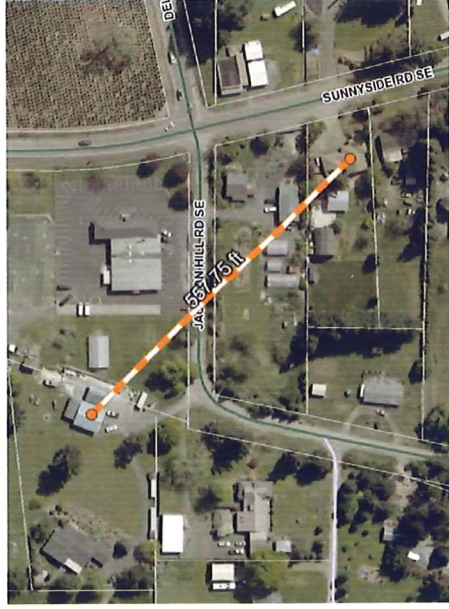
Dust plume going 20' into the air, in the foreground is the church volleyball court and this plume is wafting over that and then blowing into our cherry orchard.

This is a still image that captures the video showing a dust plume leaving the proposed business property.

The way this business is currently being managed with open air blasting is not a compatible use with the neighborhood where there are food products being produced and also kids play areas. There should be absolutely zero byproduct leaving that blasting operation and spilling onto neighbors' properties for it to be considered a compatible use.

Please watch the videos and decide for yourself if you would want lead paint, chromium and cadmium vapor blowing onto your food?

Noise-The DB500 is a significant noise producer far in excess of what County Code allows.



Both neighbors to the South of me can hear the machine, some as far as 550' away. In our house it can be heard through the walls with closed doors and windows.

The noise produced by this machine is an offensive nuisance to the neighborhood. The church next door has an agreement that they will not operate the machine on Sunday's because it's so loud. We have to listen to it all day long throughout the work week.

Quote from the DB500 operator's manual:

"Loud noise generated by blasting can cause hearing damage. Everyone in the area must use proper hearing protection."



The Marion County Code requires a finding that the operation will not create an offensive noise nuisance. The record contains no objective acoustical measurements supporting that finding. Instead, the conclusion is based solely upon subjective observations. Because the applicant bears the burden of proof, I respectfully submit that an independent acoustical study should have been performed before the Commission concludes that this criterion has been satisfied.

Solutions?

- I'm not here to try to destroy someone's business, I'm here to protect my own business and my health. This business cannot be allowed to operate where it is the way it has for the past 6 years. It is not dustless; it is toxic dust that can cause serious health issues in the long run and it has been blowing around the neighborhood for way too long now.



Natural Resources Conservation Service
U.S. DEPARTMENT OF AGRICULTURE

Options?

Enclose the open-air blast shed, operating per the MCC Home Occupation guidelines only in a fully enclosed structure and start following the manufacturer's guidelines for the proper cleanup and disposal of the blast material. Place the compressor and blast unit in a well-insulated structure to mitigate the noise.

Maybe there are grants available to help this business not have an adverse impact on neighboring farms?

Technical Appendix

Scientific Considerations Regarding Dustless (Wet Abrasive) Blasting

Conditional Use Case CU26-020

Prepared by: Mark Akimoff

Purpose

This appendix addresses a single question before the Planning Commission:

Has the applicant demonstrated, with objective evidence, that abrasive blasting emissions cannot migrate beyond the property boundary and affect neighboring properties? It is not good enough to state that this operation is dustless when the video and photograph evidence to the commission shows otherwise.

The discussion below is based upon publicly available guidance from OSHA and accepted industrial hygiene principles.

1. Dustless Blasting Reduces Dust—It Does Not Eliminate It

The applicant has stated that because abrasive media is mixed with water, there is no off-site movement of blasting material. Code enforcement when responding to complaints about the blasting has said that “it is just water vapor”

Current occupational safety guidance does not support this conclusion.

OSHA recommends wet abrasive blasting because it reduces airborne dust compared to conventional dry blasting. OSHA describes wet abrasive blasting as producing “substantially lower dust emissions” than dry abrasive blasting—not zero emissions. OSHA notes that wet methods lessen, rather than eliminate, the amount of containment required.

If wet abrasive blasting produced no airborne emissions, OSHA would not continue to require ventilation, containment, and respiratory protection under many operating conditions.

2. OSHA Continues to Require Exposure Controls During Wet Abrasive Blasting

OSHA recognizes improvements in vapor and wet abrasive blasting technology but does not presume that exposures are eliminated.

Instead, OSHA explains that operators may avoid certain respiratory requirements only if the employer demonstrates—through appropriate exposure sampling—that airborne contaminant concentrations remain below applicable exposure limits.

This reflects an important scientific principle:

Reduced emissions are not equivalent to zero emissions.

Actual airborne exposure must be demonstrated through measurement rather than assumed.

3. Wet Abrasive Blasting Still Produces Airborne Material

Although abrasive enters the nozzle suspended in water, several physical processes can still generate airborne particulate:

atomization of water into fine droplets; rebound of abrasive from the work surface;

fragmentation of paint coatings; fragmentation of corrosion products; fragmentation of body filler and primer; fracture of abrasive particles themselves.

These materials become entrained in droplets and aerosols generated during impact.

As droplets evaporate, fine particulate matter may remain suspended in air depending upon particle size and meteorological conditions.

This is why industrial hygiene guidance continues to address dust control during wet abrasive blasting rather than treating the process as emission-free.

4. Wet Abrasive Blasting Does Not Eliminate Airborne Particulate Matter

The applicant has asserted that because the abrasive media is mixed with water in a slurry, there is no off-site movement of particulate material. This assertion is not supported by occupational safety guidance or the physics of abrasive blasting.

Wet abrasive blasting (also referred to as slurry blasting, vapor blasting, or dustless blasting) is recognized by the Occupational Safety and Health Administration (OSHA) as an engineering control that substantially reduces airborne dust compared to conventional dry blasting. However, OSHA does not recognize wet blasting as a process that eliminates airborne particulate emissions.

In an official OSHA Standard Interpretation dated August 13, 2015, addressing wet abrasive blasting systems, OSHA states that redesigned wet blasting systems "offer a reduction of dust from blast operations." OSHA nevertheless continues to require respiratory protection for operators unless exposure monitoring demonstrates that airborne contaminant concentrations remain below applicable exposure limits and the operator is physically isolated from the blasting operation in a properly ventilated enclosure. If wet blasting eliminated airborne particulate emissions, these respiratory protection requirements would not be necessary.

Similarly, OSHA's Shipyard Employment guidance states that:

"Wet abrasive blasting... produces substantially lower dust emissions compared to dry blasting."

The guidance further explains that water suppression systems may reduce airborne dust by approximately 50 to 75 percent, indicating that a measurable fraction of respirable particulate matter may still become airborne during blasting operations. While the exact reduction depends on operating conditions and equipment configuration, the guidance clearly distinguishes dust suppression from dust elimination.

In addition, OSHA's construction standard governing abrasive blasting recognizes that blasting operations pulverize both the abrasive media and the substrate, producing respirable-sized particles. These particles may originate from:

The abrasive media itself; The blasted substrate (such as concrete, masonry, or metal);
Surface coatings including paint, corrosion products, or other contaminants.

The addition of water reduces the quantity of airborne dust generated during impact but does not prevent the creation of fine particles. Once the water evaporates, residual fine material deposited on surrounding surfaces may be re-entrained into the air by wind, vehicle traffic, maintenance activities, or mechanical disturbance.

This latter mechanism appears consistent with video evidence documenting the operation. The videos show visible particulate plumes generated after blasting residues had dried and were subsequently disturbed using a gasoline-powered leaf blower. The presence of these visible plumes demonstrates that fine particulate remained available for airborne transport after the blasting process had concluded. Although larger particles settle rapidly, the finer respirable fraction cannot be evaluated by visual observation alone and may remain suspended for extended periods depending on meteorological conditions.

Accordingly, the assertion that slurry blasting results in "no off-site movement of material" is not supported by OSHA guidance or established principles of aerosol science. Wet

blasting is properly characterized as a dust suppression technology, not a zero-emission technology. Any evaluation of potential impacts to neighboring properties should therefore consider both particulates generated during blasting and the potential for re-entrainment of dried blasting residues after operations have ceased.

References

Occupational Safety and Health Administration (OSHA). Standard Interpretation: Respiratory protection for operators of wet abrasive blasting systems. August 13, 2015.

Occupational Safety and Health Administration (OSHA). Shipyard Employment Guidance: Abrasive Blasting.

Occupational Safety and Health Administration. 29 CFR §1926.57, Ventilation and Abrasive Blasting.

II. Presence of Heavy Metals Does Not Depend Upon Hazardous Waste Classification

The hazardous waste determination submitted by the applicant concludes that the spent blasting media is not classified as hazardous waste under the federal Toxicity Characteristic Leaching Procedure (TCLP).

This conclusion should be interpreted correctly.

The TCLP is designed to determine whether waste disposed in a landfill is likely to leach contaminants into groundwater.

It is not designed to evaluate:

airborne transport; inhalation exposure; particulate deposition onto neighboring properties; agricultural compatibility.

The analytical report nevertheless identifies measurable concentrations of metals including:

TCLP Results vs. RCRA Hazardous Waste Threshold			
RCRA 8 Metal	Rolls Royce (mg/L)	General (mg/L)	RCRA HW Threshold (mg/L)
Arsenic	ND (0.00500)	ND (0.00500)	5.0
Barium	2.84	2.87	100.0
Cadmium	0.00826	0.0380	1.0
Chromium	0.160	0.0378	5.0
Lead	1.54	2.11	5.0
Mercury	ND (0.000500)	ND (0.000500)	0.2
Selenium	ND (0.0500)	ND (0.0500)	1.0
Silver	ND (0.00500)	ND (0.00500)	5.0

ND = non-detect above the respective method detection limit (MDL)

The question for land use compatibility is therefore not whether these concentrations exceed hazardous waste thresholds.

The relevant question is whether particulate containing these materials can migrate beyond the property boundary.

The record currently contains no particulate monitoring addressing that question.

5. Visible Plumes Are Evidence of Material Transport

Video and picture evidence shows some material is clearly leaving the blasting area. The exact composition of those plumes cannot be determined visually.

However, visible plume movement directly contradicts the assertion that no blasting material leaves the property.

If the applicant maintains that zero off-site transport occurs, that conclusion should be supported through objective monitoring rather than assumption.

6. No Air Dispersion Analysis Appears in the Record

The application and staff report do not appear to include:

particulate dispersion modeling;

PM10 monitoring;

PM2.5 monitoring;

deposition sampling;

downwind air sampling;

meteorological analysis;

verification that blasting residue remains entirely on site.

Without these data, the record does not demonstrate that off-site transport cannot occur.

7. Noise Analysis

The Marion County Code requires that a home occupation not create a public or private nuisance.

The staff report concludes that the noise is acceptable based upon field observations by Code Enforcement personnel.

However, the record does not appear to include:

calibrated sound level measurements; octave-band analysis; comparison with Oregon DEQ noise standards; duration analysis; cumulative noise analysis; property-line sound measurements during active blasting.

Objective acoustical measurements would provide a stronger basis for determining compliance with the nuisance standard. I have lived at this property for almost 20 years and I can tell you beyond a doubt that the noise generated by the DB500 is a nuisance and far in excess of the allowable limits by the Marion County Code. Several neighbors to the south of my property reported they can hear it and find it a nuisance as well. These properties are 450-550' from the blasting shed. If measurements need to be taken during blasting operations that should be arranged and the machine run at full throttle, half throttle and idle. These should be measured at our property line and our house. One code compliance officers subjective opinion is not enough for this determination to be made. When I questioned the officer how he came up with the noise determination he stated "I live in the City and its loud all the time". This is a rural community, not an industrial site and regardless the code requires actual measurements be taken for a determination to be made.

8. Agricultural Compatibility

Adjacent agricultural operations differ from ordinary residential uses.

Commercial nursery production and food crop production are sensitive to off-site particulate deposition because products are marketed directly to consumers.

Accordingly, compatibility should consider not only whether regulatory thresholds are exceeded, but also whether industrial emissions have the potential to interfere with normal agricultural operations. We cannot sell cherries, figs and plums that are covered in Lead, Chromium and Cadmium dust. These are cancer causing compounds. We cannot sell vegetables and cut flowers that are covered in 1950's era automobile paint.

Conclusion

The purpose of this appendix is to show that this business has not been operating safely and in a manner that does not effect neighboring properties. The open air blasting shed with no environmental controls is not an appropriate setup given the proximity to playgrounds and food producers. The operator does not even follow the manufacturers guidelines for the proper handling and disposal of the material as is evidenced through the pictures presented showing multiple years of stockpiled dry material left to be blown in the wind.

This appendix does show that several conclusions contained in the current record and staff report are based primarily upon assumptions rather than objective technical analysis.

Specifically, the record does not appear to include independent evidence demonstrating that:

blasting emissions remain entirely on site;

neighboring agricultural properties cannot receive particulate deposition;

airborne particulate concentrations remain below applicable exposure levels beyond the property boundary;

or noise generated during normal operations satisfies the applicable nuisance criteria through objective acoustical measurement.

Until these questions are addressed through appropriate technical evaluation, it is respectfully submitted that the record does not contain sufficient evidence to conclude that the proposal satisfies the applicable Marion County Conditional Use and Home Occupation approval criteria.

Management of Abrasive Blasting Waste Containing Lead-Based Paint

Comparison of Manufacturer Guidance, OSHA, EPA, and Oregon DEQ

Source	Key Guidance	Implication
Dustless Blasting (Manufacturer)	Test painted surfaces for lead before blasting. Establish containment before beginning work. Collect all spent abrasive, paint chips, dust, and contaminated PPE immediately. Store waste in sealed, labeled containers protected from weather. Perform TCLP testing when appropriate and dispose of hazardous waste at an approved facility.	The manufacturer does not recommend leaving spent blasting media on the ground or exposed to wind. Proper containment and collection are considered part of normal operating procedure.
OSHA – Lead in Construction (29 CFR 1926.62)	Abrasive blasting of lead-coated surfaces is recognized as a high-exposure activity requiring respiratory protection, protective clothing, hygiene facilities, worker training, and exposure controls. Employers must prevent employee exposure to airborne lead generated during blasting.	OSHA recognizes abrasive blasting of lead paint as a significant health hazard requiring extensive protective measures for workers.
U.S. EPA	Lead-containing debris and dust must be collected daily and kept under containment or behind barriers that prevent dust from escaping the work area. Waste must remain contained during transport. If blasting waste exhibits hazardous characteristics (for example, TCLP lead ≥ 5 mg/L), it must be managed as hazardous waste under RCRA.	EPA guidance emphasizes preventing the release of lead-contaminated dust and debris into surrounding properties and properly characterizing blasting waste before disposal.
Oregon Department of Environmental Quality (DEQ)	Paint removed by blasting, along with spent blast media, wastewater, and paint chips, requires a hazardous waste determination. Proper characterization is necessary before disposal. Commercial and industrial waste does not qualify for the residential household waste exemption.	Oregon specifically identifies abrasive blasting residue as a waste stream requiring evaluation before disposal and proper management when hazardous characteristics are present.

Common Principle

Although these agencies have different responsibilities, they all communicate the same fundamental expectation:

- **Contain** blasting operations.
- **Prevent off-site migration** of dust and debris.
- **Collect all spent abrasive and paint waste.**
- **Properly characterize the waste** if lead or other hazardous coatings may be present.
- **Dispose of waste at an appropriate facility** if hazardous.

Relevance to Land Use

When spent crushed-glass blasting media mixed with paint residue is left in uncovered piles outdoors where it can be dispersed by wind, it is inconsistent with:

- the manufacturer's recommended operating procedures,
- OSHA's recognition of lead-blasting hazards,
- EPA guidance for containing lead-contaminated waste, and
- Oregon DEQ guidance requiring evaluation and proper management of blasting waste.

The issue is not merely worker safety. Proper waste containment helps prevent contaminated dust and debris from migrating onto neighboring properties and reduces the potential for environmental contamination and public exposure.