

Disposal of Demolition Waste Resulting from Structural Fires

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Structural fires are known generators of carcinogenic substances that pose a risk to fire fighters and those who are exposed to cleanup efforts. The International Agency for Research on Cancer (IARC) has identified the following list of materials commonly encountered in structural fire incidents:

<u>IARC Group 1 agents</u> <i>(known humans carcinogens)</i>	<u>IARC Group 2A agents</u> <i>(probable human carcinogens)</i>
<ul style="list-style-type: none">▪ arsenic▪ asbestos▪ benzene▪ benzo[a]pyrene▪ 1,3-butadiene▪ cadmium▪ diesel engine exhaust▪ dioxin▪ formaldehyde▪ pentachlorophenol▪ polychlorinated biphenyls▪ radionuclides▪ soot	<ul style="list-style-type: none">▪ creosote▪ dibenz[a,h]anthracene (a polycyclic aromatic hydrocarbon [PAH])▪ wood combustion products▪ shift work affecting circadian rhythm

Likely, other toxic substances are generated during structural fires given the complexity of the environment involved. The Regional District of Mount Waddington (RDMW) as part of its responsibility to protect the health of its employees and contractors has established rules regarding the disposal of structural fire generated waste (SFGW) at 7 Mile Landfill and Recycling Center which are as follows:

- Commercial loads can only be dropped off at 7 Mile Landfill Monday to Friday
- Appointments must be made in advance for dropping off SFGW by contacting the RDMW office at 250 956-3301.
- SFGW waste must be delivered to 7 Mile securely wrapped in two layers of 6 mil plastic film. Securely wrapped SFGW waste means that there is a low risk for anyone handling the loads to be exposed to SFGW.
- When waste is being transported in a bin that has been lined with 2 layers of 6 mil poly film, the total volume of the load cannot exceed 15 yards
- For SFGW waste transported in bags, see the following guidance for loading and securing the bag. Individual bags must be 50 lbs (22.7 kg) or less to avoid bags rupturing when being moved.

Improper Packaging



- Bag is over filled and too heavy to handle
- Bags must be under 50 pounds in weight
- Taping does not secure opening allowing potential SFGW escapement.

Potential Rejection for Insufficient Packaging

Improper Packaging



- Bag is over filled and too heavy to handle
- Bags must be under 50 pounds in weight
- Taping does not secure opening allowing potential SFGW escapement.
- Only one layer of 6 mil polyethylene
- Bag is ripped

Potential Rejection for Insufficient Packaging

Proper Packaging



- Bag is not overfilled and a reasonable weight for one person to move
- Sufficient bagging left over for top to be twisted shut and then doubled over prior to taping shut.
- Two layers of 6 mil polyethylene packaging

Guaranteed Acceptance due to Proper Packaging

If there are any questions regarding the disposal of SFGW, please contact the RDMW Operations Manager at 250 956-3301.

