

# “411”

INFORMATION PLEASE...

## Technical Data for Fire, Smoke and Water Damage

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### Category III Water Damage Black Water Mitigation

As this article is prepared the first named storm of 2005, Arlene, has already driven north through the Pensacola/Mobile region which has not yet recovered from Ivan of 2004. Arlene then moved into the Midwest, drifting toward the Northeast, dumping record amounts of rain in some areas, and causing serious flooding in its wake.

According to the IICRC Standard S500 Category III, water damage is referred to as “black

water,” which is water damage to a structure where the water origin is unsanitary or potentially infectious to humans.

The “black water” classification also includes less contaminated water that has not been treated in a timely manner. The classification depends on the origin of the water damage and the time variable, regardless of the actual color or appearance of the water. Some examples of Category III black water in-

clude all sewage back-flows and all rising water from rivers, streams, and seawater that enter a structure.

When dealing with Category III water damage, a Professional Restoration Business should consider several basic factors. First, the safety of the building oc-

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cupants and all workers is the primary consideration. Second, the business should conduct a thorough inspection to determine the severity of the damage since that will affect the restoration process. Third should be the rapid removal of excess water, the removal of all porous items that have been contaminated, and the disposal of the sewage or other wastes.

Finally, the business will need to establish a Balanced Drying System to re-

store the environment to its pre-loss dry state.

Safety in all instances must be the very first consideration when exposure to Category III contaminants is a possibility. Category III water intrusion could contain many harmful viruses including Hepatitis A, Rotavirus, Adenoviruses, and Enteroviruses. Several parasites and many kinds of harmful bacteria could also be present. And, of course, numerous fungi in the form of

mold spores are also present that could become a problem if timely decontamination does not occur and if professional drying does not begin within twenty-four to forty-eight hours.

Category III water intrusion can be subdivided into three levels that will help the Professional Restoration Business process the contamination professionally.

Level I black water contamination is usually a very limited waste problem. It al-

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ways originates inside the building or house, affects a small area, doesn't affect porous material, doesn't penetrate the structure, and has had limited time of exposure. A small toilet overflow is one example.

Level II black water contamination also originates inside the building. However, the area of direct contamination is larger. Porous materials as well as non-porous materials are affected. Restoration must be more thorough to include removing moisture barriers such as vinyl and plastics that will contain the contamination. Cabinets and other structural enclosures must be inspected and possibly removed if the contamination is present, especially if it is inside the walls behind these items.

All porous items such as drywall, carpet, pad, upholstery, drapery, and particle-board furniture that have been contaminated must be removed and disposed of.

Level III black water includes water and waste coming from an outside source

such as the septic system or main sewage line. Also included is the damage caused by rivers, streams, and ocean waters. Level III indicates more contamination for a longer period and presents a much greater health risk.

All black water losses present serious risk of illness. Therefore, restoration professionals should ensure that all employees wear appropriate Personal Protective Equipment. For Level I losses, this could be just boots and gloves.

For Level II and Level III losses, the protection will be more extensive, which could include waterproof coveralls, face shields, and even respirators. The Professional Restoration Business will know when to use an Air Scrubber to clean the air or a Negative Air Machine and containment to prevent contamination from spreading to unaffected areas. The Professional Restoration Business will also make certain that all remaining surfaces are cleaned and sanitized with appropriate cleaners and ap-

proved disinfectants.

In some cases, structural materials are sealed with an appropriate product to help ensure that contamination does not spread and to help prevent the development of mold.

Following a Category III black water loss, a Professional Restoration Business will know and use the proper procedures, techniques, products and equipment to help restore property to its pre-loss condition safely and as rapidly as possible.

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