

NEW YORK ENVIRONMENTAL LAW & JUSTICE PROJECT

member of the Clean Water Network, National Coalition against the Misuse of Pesticides,
National Lawyers Guild
Environmental Counsel to the Uniformed Firefighters Association Local 94 I.A.F.F. AFL-CIO

MOLD CONTAMINATION IN 130 LIBERTY STREET

Despite the omission of a sampling program, the recent visual mold surveys performed by Lower Manhattan Development Corporation (LMDC) show extensive contamination of mold throughout the 130 Liberty Street building a.k.a. the Deutsche Bank building. The visual mold survey demonstrates that 130 Liberty Street continues to be infested with mold despite the claims that Deutsche Bank performed two or more mold cleanups. Any further decontamination / demolition activity should take account of possible mold recontamination.

TRC Environmental Corp., contracted by LMDC, published Visual Mold Inspection Summary on February 22th, 2005¹. Compared to the Louis Berger's Initial Characterization Report which found 105 SF (square feet) of mold contaminated building materials, **TRC found that 6160 SF of mold contaminated materials in total scattered throughout the buildings from top to bottom** (see Table 1, page 3).

Furthermore, TRC confirmed visible water damage in many floors throughout the building [see Table 2, page 4]. Even though the EPA or New York State / City Department of Health do not have particular mold trigger levels to necessitate mold cleanup, both agencies have set up guidelines that mold contamination greater than contiguous 100 SF in area is "extensive" and "severe" and strongly advises professional consultation and planning².



Figure 7: Floor 27 carpet water damage and visible mold (from Visual Mold Inspection Summary by TRC)

The results published by TRC affirm three major points asserted by the New York Environmental Law & Justice Project

¹ Available at http://www.renewnyc.com/content/pdfs/130liberty/Visual_Mold_Inspection_Summary.pdf

Conducted on January 4, 5, 6, 7 and 14, 2005, the mold inspection "included a visual assessment of the accessible and previously inaccessible interior areas of the Building to identify the locations and determine the quantities of visible mold, areas of visible moisture and water-damaged materials. All floors, including the basement areas, were accessed by TRC."

² See *Mold Remediation in Schools and Commercial Buildings*, published by EPA Office of Air and Radiation, Indoor Environments Division. Available at http://www.epa.gov/iaq/molds/mold_remediation.html
See also *Guidelines on Assessment and Remediation of Fungi in Indoor Environments*, published by New York State Department of Health (DOH Guideline). Available at <http://www.ci.nyc.ny.us/html/doh/html/epi/moldrpt1.html>

1. **Mold Contamination in 130 Liberty Street, despite the claims to the contrary, is extensive and serious in damage potential.** We have already pointed out to documents that discuss synergies between mold and other toxicants in 130 Liberty Street. Even though the recent survey did not include sampling for speciation, the survey found massive quantity of mold that could produce potent mycotoxins, allergic reactions or develop Organic Dust Toxic Syndrome (ODTS) or Hypersensitivity Pneumonitis (HP) in remediation workers. [see DOH Guideline]. **Proper guidelines to clean up mold in conjunction with other hazardous material must be set up and enforced.** For instance, the current deconstruction plan proposes asbestos removal protocol that involves wetting down the entire structure to prevent aerial exposure. The wetting down method would exacerbate the mold contamination and also increase the chance of groundwater contamination unless protective measures are established and followed.

2. **Mold Contamination in 130 Liberty Street, despite the claims to the contrary, is recurring.** Commissioned by the Deutsche Bank, the REPORT ON MICROORGANISMS AT 130 LIBERTY STREET by Brian G. Shelton, MPH described discovery of large-scale microbial contamination, consisting of mold and legionella bacteria, causing agent of legionnaire's disease. According to the report, these findings occurred after a large-scale microbiological remediation of building materials and contents was performed by "physically removing building materials with visible growth from the Building." We approached the EPA with this data but the EPA refused to take any action, stating that Deutsche Bank have since performed a mold remediation. **The recent study, however, shows that mold contamination is still extensive and persistent. Any remediation would require elimination of the source of mold contamination, including significant water damage to the building.**

3. **Sampling and speciation may prove useful information to the public.** Even though visual inspection is enough to trigger mold cleanup, sampling for identifying species of mold in the building will educate the public and workers on what to expect. They, for example, would need to know if legionella bacteria is still persistent in the Deutsche Bank building.



Figure 14: 4th Floor (from Visual Mold Inspection Summary by TRC)

Extensive mold contamination was the initial reason that prompted the Deutsche Bank to consider taking down the 130 Liberty Street building instead of reoccupation. The recent testing results affirm that mold contamination in 130 Liberty Street is an important health issue that the Lower Manhattan Development Corporation (LMDC), the Environmental Protection Agency (EPA), Department of Health, OSHA and other agencies must address as mandated by their role in protecting the health of the workers and surrounding community.

TABLE 1
Visible Mold Locations

Floor	Mold Contaminated-Material Description	Floor Location	Damage Area Approximate Total Quantities (in square feet (SF))
Cellar "B"	Books/papers on two steel shelving units. Mold on adjacent concrete flooring and walls. Mold on walls of elevator shaft pits (3)	Southeast and elevator shafts	10 SF total on floors and walls. 2 shelving units of books/papers
Cellar "A"	Decontamination unit walls, floors and ceilings. Vault concrete walls and floor	Northerly exterior vault	500 SF
1	Sheetrock walls	Southeast	20 SF
4	Exterior and interior of ovens in the kitchen area and in washroom sink	South (ovens) and east (sink)	50 SF
9	Sheetrock walls	South-central reception room	20 SF
11	Sheetrock walls	Southwest and northwest (4 areas)	80 SF
27	Flooring, carpeting, sheetrock walls, and 2' x 2' drop ceiling tiles	Northeast	2300 SF
28	Ceramic floor tile and associated grout-lines	Central men's restroom	600 SF
32	Flooring, carpeting, sheetrock walls, and 2' x 2' drop ceiling tiles	Office, conference, reception and open areas in the Southeast-west and Northwest	2000 SF
40	Mechanical equipment, vertical piping at ceiling, concrete walls, floors and concrete and steel column painted sections	North and northeast	60 SF
40	Mechanical shaft insulation/fireproofing and air handler interior insulation	Central mechanical shaft, air handler units	500 SF
41	Spray-on fireproofing, concrete floor, and vertical piping at ceiling	Central mechanical equipment room	20 SF

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Supplementary Info: Hazard Communication (from NY State Department of Health Mold Guideline)

When fungal growth requiring large-scale remediation is found, the building owner, management, and/or employer should notify occupants in the affected area(s) of its presence. Notification should include a description of the remedial measures to be taken and a timetable for completion. Group meetings held before and after remediation with full disclosure of plans and results can be an effective communication mechanism. Individuals with persistent health problems that appear to be related to bioaerosol exposure should see their physicians for a referral to practitioners who are trained in occupational/environmental medicine or related specialties and are knowledgeable about these types of exposures. Individuals seeking medical attention should be provided with a copy of all inspection results and interpretation to give to their medical practitioners.

<p align="center">TABLE 2 Visible Water Damage/Water Infiltration Locations</p>		
Floor	Water Damage/Infiltration Description	Floor Location
Cellar "B"	Cellar "B" is an exposed area with visible water infiltration. Standing water visible in elevator-shaft pits (3)	Exposed area along Northerly side of floor. Elevator-shaft pits.
Cellar "A"	Cellar "A" is an exposed area with visible water infiltration	Exposed area along Northerly side of floor
Floors 1-39	Moisture on interior curtain wall aluminum siding	Exposed curtain wall areas throughout Floors 1-39
1	Floor 1 is an exposed area with visible water infiltration	Exposed area along Northerly side of floor
5	Entire floor area flooded with several inches of standing water	Entire floor area
20	Pipe leak impact to ceiling tile and carpet (approximately 2,500 square feet of damage)	Southerly open area
22	Pipe leak impact on sheetrock wall (approximately 120 square feet of damage)	Easterly open area
23	Pipe leak impact to ceiling tile, waste bags and carpet (approximately 5,625 square feet of damage)	Southerly open areas and offices
24	Pipe leak impact to ceiling tile, waste bags and carpet (approximately 4,375 square feet of damage)	Southerly open areas and offices
25	Pipe leak impact to ceiling tile and carpet (approximately 8,750 square feet of damage)	Southerly open areas and offices
26	Water damaged sheetrock (approximately 10 square feet of damage)	Southeasterly corner office
27	Pipe leak impact to ceiling tile, radiator covers and carpet (approximately 2,285 square feet of damage)	Northeasterly open areas and offices
32	Pipe leak impact to ceiling tile, carpet and sheetrock walls (approximately 700 square feet)	Northeast and southwest open areas and offices. Southeast office. Central service hall.
35	Pipe leak impact to ceiling tile, carpet and sheetrock walls (approximately 625 square feet)	Central service areas and conference room
36	Fire hose valve leak impact to carpet and sheetrock wall	Central hallway area
37	Pipe leak impact to ceiling tile and carpet (approximately 1,900 square feet)	Central offices and easterly trading floor areas
38	Water damaged carpet and floor tile. Moist areas beneath raised floor	Southerly central corridor and central-west open floor area
39	Pipe leak impact to ceiling tile and carpet (approximately 220 square feet)	Central corridor area
40	Standing water (approximately 1 foot deep) in central area. Six visible pipe leaks. Impact to concrete floors and mechanical equipment	Throughout central, northerly and westerly areas.
41	Two areas of visible pipe leaks (approximately 20 square feet). Impact to spray-on fireproofing and concrete walls/floors	Central mechanical equipment rooms

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WE ENCOURAGE COMMENTS AND OPEN DISCUSSIONS
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