



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 2 290 BROADWAY

NEW YORK. NEW YORK 10007-1866

May 11, 2006

BY ELECTRONIC MAIL AND REGULAR MAIL

Mr. Victor J. Gallo Senior Advisor & Counsel, Environmental & Regulatory Affairs Lower Manhattan Development Corporation One Liberty Plaza, 20th Floor New York, New York 10006

Re: Coin Vault Drawings Dated May 3, 2006

Dear Mr. Gallo:

The United States Environmental Protection Agency (EPA) has reviewed the draft coin vault drawings, D-101 and D-102, dated May 3, 2006, for the 130 Liberty Street deconstruction project. EPA has also consulted with the U.S. Department of Labor Occupational Safety and Health Administration (OSHA), New York State Department of Labor (NYSDOL), the New York City Department of Environmental Protection (NYCDEP) about the May 3, 2006 draft coin vault drawings. The regulators' comments incorporated in the enclosed comments pertain to their regulatory practice areas.

NYSDOL and NYCDEP focused their review on the regulations related to performance of an asbestos project. EPA's review concerned containment measures to control potential releases of contaminants, proper procedures for monitoring and waste disposal. OSHA's primary area of review was worker safety and health. The regulators' comments incorporated in this letter do not address the demolition methodology, structural engineering issues regarding the coin vault demolition, or the future use of this portion of the property. By separate communication, LMDC should be provided with comments on the demolition of the coin vault by the New York City Department of Buildings (DOB) consistent with DOB's expertise in this area. As previously stated by the regulators, implementation of proper procedures and careful monitoring of abatement and deconstruction activities by LMDC and its contractors will help prevent the occurrence of a situation that may present an imminent and substantial endangerment to public and worker health and the environment. The regulators reserve the right to modify the enclosed comments and/or make additional comments about the proposed work if new information becomes available or information, currently known and considered, is changed in whole or in part during the coin vault demolition. The enclosed comments do not pertain to any matters not addressed in the documents reviewed. In the event that the drawings for the coin vault have to be supplemented as the project proceeds, the regulators will review and may provide additional comments after we review the supplementary information and documents required to be submitted by LMDC.

To explain the revisions to the draft coin vault drawings, EPA requests that LMDC provide the regulators with a separate response to each of the enclosed comments that states: (1) whether and how the comments have been incorporated; (2) if a comment has not been incorporated, the reason it was not incorporated; and, (3) any additional information to address LMDC's response to the enclosed comments. The supplement will facilitate the regulators' review process. Kindly let us know LMDC's schedule for submitting its response.

We look forward to your response to our comments prior to your commencement of the coin vault demolition work.

Sincerely.

Pat Evangelista WTC Coordinator New York City Response and Recovery Operations

Enclosure

cc: Sal Carlomagno, NYSDEC w/encl. Chris Alonge, NYSDOL w/encl. Krish Radhakrishnan, NYCDEP w/encl. Richard Mendelson, OSHA w/encl. Robert Iulo, NYCDOB w/encl.

EPA Comments on the Coin Vault Drawings D-101 and D-102 Dated May 3, 2006

DRAWING D-101 (Coin Vault Demolition Plan)

1. <u>Specifications 1.3.D.3, 2.1.A, and 2.5.B</u>: Reference is made to "building demolition" in these specifications. LMDC should re-word these specifications since the specifications pertain solely to the demolition of the exterior portion of the building's coin vault and not the entire building.

2. <u>1.1 (Summary) & 1.2 (Definitions)</u>: Specification 1.1 indicates that the exterior portion of the building's coin vault and its below-grade structures will be "removed". Specification 1.2 states that the definition for "remove" is to "detach items from existing construction and legally dispose of them off-site unless indicated to be removed and salvaged or recycled." Please clarify whether the demolition debris will be disposed off-site or "salvaged or recycled" on-site as backfill. Specification 2.7 states that the demolished material will be disposed off-site.

3. <u>1.3.B (Quality Assurance - Regulatory Requirements)</u>: This specification states the following: "complies with governing EPA notification regulations before beginning demolition." It is unclear what "EPA notification regulations" for demolition that LMDC is referring to. Please clarify.

4. <u>1.3.D.4 (Quality Assurance – Predemolition Conference)</u>: This specification states that protection requirements will be reviewed and finalized before demolition. Explain the protection requirements for this task

5. <u>1.4.B.2 (Project Conditions – Hazardous Materials)</u>: This specification states that if additional suspected hazardous materials are encountered during the demolition, the contractor will remove such material. Has the contractor established a contingency plan/protocol to identify, assess, and address any potentially hazardous materials encountered during the demolition of the coin vault which may not have been encountered during the previous asbestos project work? Explain the contingency plan/protocol measures for the coin vault demolition.

6. <u>2.2.B (Preparation – Temporary Shoring)</u>: This specification discusses temporary shoring for the "construction being demolished." Explain what this temporary shoring entails. Is temporary shoring needed for the portion of the coin vault to remain, and is any shoring needed for the building? Has the issue of temporary shoring been discussed, reviewed, and commented upon by the NYCDOB? If yes or no, explain.

7. <u>2.3 (Protection)</u>: This specification states that protection will be provided to prevent damage to the structure to remain. Describe fully the nature of this "protection." Has this "protection" been discussed, reviewed, and commented upon by the NYCDOB? If yes or no, explain.

8. <u>2.4 (Demolition General)</u>: This specification states the following: "demolish indicated existing coin vault structure completely". Does the word "indicated" in this specification only denote the portion of the coin vault structure to be removed in Drawing D-101-2 and its legend? If not, this specification implies that the entire coin vault structure is being demolished.

9. <u>2.5.C (Mechanical Demolition–Chute)</u>: This specification states that debris will be removed from elevated portions by chute or other device to grade level in a controlled descent. What specific impact and dust control measures will be implemented? What is the "other device"?

10. <u>2.5.D (Mechanical Demolition–Cut Concrete)</u>: This specification states to cut concrete full depth using a power driven saw. What dust control measures will be implemented?

11. <u>2.7 (Disposal of Demolished Materials) and Contractor's Procedure for Coin Vault</u> <u>Removal – Means & Methods:</u>

(a) Specification 2.7.A.1 conflicts with the Means and Methods section with regard to the potential accumulation of demolition debris from the coin vault on-site. Specification 2.7.A.1 states the following: "do not allow demolished materials to accumulate on-site". The Means and Methods Section states that concrete will be stockpiled on-site. Please clarify if coin vault demolition debris will be stored on-site or not. If so, where and how will it be stored and what will be its final destination?

(b) The Means and Methods Section states that the concrete to be stockpiled on-site is "to be processed at a later date". What "processing" will be occurring and where will this "processing" be occurring? Please fully explain this statement.

12. <u>Contractor's Procedure for Coin Vault Removal – Equipment:</u> This section states that a mechanical concrete crusher may be used. Pleas explain this in detail and what dust control measures will be implemented.

13. <u>Contractor's Procedure for Coin Vault Removal – Means & Methods</u>: This section states that an "inside protection barrier wall" is located within the area behind the vault. Provide details on the "inside protection barrier wall".

14. Describe how the areas still to be abated that abut the portion of the coin vault not to be demolished will not be impacted or exposed during the demolition of the exterior portion of the building's coin vault.

DRAWING D-102 (Cellar A - Coin Vault Existing & Proposed Conditions)

15. Drawing D-102-2 and Drawing D-102-6 has a wall designated as "environmental protection barrier wall". Provide specific details about this "environmental protection barrier wall".

16. Will additional critical barriers need to be installed for the areas still to be abated that abut the portion of the coin vault not to be demolished? Explain what will be installed.

17. What methods are proposed to prevent water build-up in the portion of the coin vault not to be demolished and in areas that were not yet abated and that abut the portion of the coin vault not to be demolished?

18. <u>Noise Levels for Workers</u>: Section 2.13.2 (Hearing Conservation) of the September 7, 2005 Health and Safety Plan (HASP) states the following: "If any Subcontractor exposes his employees the noise levels above 85 dBA, the Subcontractor must establish a written Hearing Conservation Program developed by a competent person as required by 29 CFR 1926.101 and 29 CFR 1910.95". Will noise levels exceed 85 dBA during the demolition of the coin vault or any other activities pertaining to Phase I or Phase II activities? If so, has a Hearing Conservation Program been developed? If not, what is the timing of the subcontractor(s) developing a written Hearing Conservation Program prior to the initiation of the coin vault demolition? Will it be added as an addendum to the HASP?

OSHA COMMENTS 130 LIBERTY STREET DECONSTRUCTION IMPLENTATION PLANS, DRAWINGS, AND COIN VAULT

• Falls down shafts or from unprotected sides or edges: This is significant because of the proposed use of chutes.

• Struck-by hazard: Falling materials. Although the plan calls for laborers with radios at the top and bottoms, the opportunity remains for miscommunication or lack of coordination. This is a concern due to the noise from the crushers and other mechanical equipment at the top of the chute.

• Struck-by hazard: Material handling equipment. The use of mechanical equipment on the slabs is necessary, but the presence of laborers on foot creates the potential for accidents. This potential is increased if laborers will be manning hose lines around the crusher. Noise levels will increase the hazard.

• Fall hazards: Material handling equipment. Stop logs (i.e., temporary curbs) need to be installed around openings (and maintained as the demolition progresses).

• Health hazard: The crusher will undoubtedly create a noise hazard (which also will inhibit communication).

• Health hazard: Once the containment is removed and demolition begins, the removal of the concrete and steel will create exposures to dust, silica, and metals. It is important not to lose sight of these hazards while so much attention is being paid to the remediation activities.

• Collapse hazard: Although we have no reason to doubt the engineering calculation, there is a potential for overloading floors (or portions thereof, or individuals bays). It is important to remember that the dead load of existing floors becomes a live load when they are removed and debris piled on lower floors. The deconstruction plan does not identify method of deconstruction for activities. How are the steel spandrels going to be removed on floors which have been deconstructed?

• Fire prevention: During torch cutting.

• Machine guarding: For concrete crusher, including lockout-tagout during downtime (i.e., clearing jams).

• Struck by hazard: Adherence to the sequence for systematic removal of steel & other building components is important. Competent persons should act as monitors, including separation of operations (i.e., keeping ground workers away from the operation when beams and columns are notched and pulled down).

• Coin Vault: Deconstruction plan does not identify means and methods of completing the deconstruction. What equipment will be used? What are the expected live and dead loads on the floors when the vault **US EPA ARCHIVE DOCUMENT**

is being removed? Is shoring required to add support to the Cellar A level?

• Is the entire coin vault being removed?

• Crushers: Is there clearance to the ceilings to safely put concrete into the crusher? The crushers seems to be approximately 7-8' at height. Will the loaders be able to safely dump the concrete into the crusher? Is the discharge height of the crusher adequate on the floors?

• Chute: How is the 1" steel plate going to be attached to the chute and how will it operate?



May 10, 2006

Pat Evangelista WTC Coordinator New York City Response and Recovery Operations US EPA Region 2 290 Broadway New York, NY 10007-1866

Re: Department Comments on LMDC/Bovis/Thorton-Thomasetti Coin Vault Demolition Plan Drawing, dated April 18, 2006, and Revised Plan Drawings dated May 3, 2006 New York, NY

Dear Pat,

The Department has received the Coin Vault Demolition Plan Drawing submittal provided by LMDC, and received by mail on April 25, 2006, along with the revised plan drawing submittal received by mail on May 8, 2006. The plan drawings have been reviewed by the Department, as they relates to asbestos project activities.

Several significant items within the revised plan drawings must be revised for consistency with the existing asbestos project site-specific variance decisions, and to address other Departmental concerns.

The Department has discussed concerns regarding the plan and drawings with the NYC DEP, and provides the following general comments, to be included with your comments on the plan drawings.

General Comments

- The information contained within the plan drawings regarding asbestos project activities, must be consistent with the detailed procedures and conditions included within the approved site-specific variances for this asbestos project. In addition, the plan drawings including notes must be revised to clearly indicate which notes and tasks apply to the asbestos project and which ones apply to non-asbestos project activities.
- The plan drawing indicates demolition impact to Cellar B in addition to the Cellar A coin vault. However, no information is included regarding the completion of necessary abatement and cleaning/decontamination of the impacted portion of Cellar B, prior to the commencement of demolition activity.
- Regarding installation of isolation barriers to maintain separation between the portions of Cellar A and Cellar B that have not been abated from the areas that have satisfactory completed, plan drawing D-102 includes two details with an "environmental barrier wall" identified at cellar A of the coin vault. However, no information is included regarding the

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specific barrier wall installation details and no information is included regarding the installation of isolation barriers required to maintain separation from the demolition area and the remaining portion of Cellar B that has not been abated, cleaned and cleared.

 During non-asbestos project structural deconstruction work, provisions must be included to identify, assess and address any potentially contaminated hidden interstitial spaces and voids that become apparent, which may not have been apparent during the previous asbestos project work. This requirement is in addition to requiring work stoppage if suspect materials are encountered.

The Department and the NYC DEP anticipate that these issues will be appropriately addressed within a revised version of the plan drawing. If you have any questions regarding these comments please contact the Department at (518) 457-1536.

Sincerely,

Christopher G. Alonge, P.E. Senior Safety and Health Engineer

ec Krish Radhakrishnan, P.E. - NYC DEP Gil Gillen – USDOL/OSHA Robert Iulo – NYC DOB Richard Fram – NYS DEC Norma Aird – NYS DOL 04-0427, 05-0813