

**STATE OF LOUISIANA  
DEPARTMENT OF ENVIRONMENTAL  
QUALITY**

**Fifth Amended Declaration of Emergency  
and Administrative Order**

**Hurricane Katrina and its Aftermath  
Agency Interest No. 130534**

**March 31, 2006**

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**STATE OF LOUISIANA  
DEPARTMENT OF ENVIRONMENTAL QUALITY**

**IN THE MATTER OF  
HURRICANE KATRINA  
AND ITS AFTERMATH**

**AGENCY INTEREST NO. 130534**

**FIFTH AMENDED DECLARATION OF EMERGENCY  
AND ADMINISTRATIVE ORDER**

Pursuant to the authority granted to me by Louisiana Revised Statutes 30:2001 *et seq.*, and particularly La. R.S. 30:2033 and 2011(D)(6), I hereby make the following findings, declaration and order, which supersede the Declaration of Emergency and Administrative Order issued by this agency on August 30, 2005, the Amended Declaration of Emergency and Administrative Order issued by this agency on September 3, 2005, the Second Amended Declaration of Emergency and Administrative Order issued by this agency on November 2, 2005, the Third Amended Declaration of Emergency and Administrative Order issued by this agency on November 17, 2005, and the Fourth Amended Declaration of Emergency and Administrative Order issued by this agency on January 13, 2006:

**FINDINGS AND DECLARATION**

1. On the 29th day of August, 2005, Hurricane Katrina (hereinafter "Hurricane") struck Louisiana, causing widespread damage within the parishes of Ascension, Assumption, East Baton Rouge, East Feliciana, Iberia, Iberville, Jefferson, Lafourche, Livingston, Orleans, Plaquemines, Pointe Coupee, St. Bernard, St. Charles, St. Helena, St. James, St. John, St. Mary, St. Martin, St. Tammany, Tangipahoa, Terrebonne, Washington, West Baton Rouge, and West Feliciana, which parishes shall constitute the specific areas covered by this Declaration and Order. These areas shall herein be referred to as the "Emergency Areas."

2. By State of Louisiana Proclamation No. 48 KBB 2005, the Governor declared on August 26, 2005, that a state of emergency exists in the state of Louisiana,

as Hurricane Katrina posed an imminent threat, carrying severe storms, high winds and torrential rain that caused flooding and damage to private property and public facilities and threatened the safety and security of the citizens of the state of Louisiana. By State of Louisiana Proclamation No. 54 KBB 2005, the Governor extended the state of emergency due to the extreme damage caused by Hurricane Katrina and the continuing disaster and emergency conditions in the affected areas.

3. On August 29, 2005, FEMA issued a Disaster Declaration, FEMA-1603-DR covering south Louisiana.

4. I find that the Hurricane has created conditions that require immediate action to prevent irreparable damage to the environment and serious threats to life or safety throughout the Emergency Areas.

WHEREFORE, I hereby declare that an emergency exists, and that the following measures are necessary to prevent irreparable damage to the environment and serious threats to life or safety throughout the Emergency Areas.

## ORDER

Within the Emergency Areas:

### **§ 1. Waste Water Treatment Systems**

#### a. Upset Provisions

Permittees with Louisiana Pollutant Discharge Elimination System (LPDES) permits should consider activating the upset provisions in their permits. LAC 33:IX.2701.N.1 defines upset as the following:

*An exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.*

An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of LAC 33:IX.2701.N.3 are met. For upsets caused by this hurricane, the 24 hour oral notification is waived unless the non-compliance may endanger human health. Authorization is hereby granted to discharge water placed in storage tanks or other containers or vessels for the purpose of stabilization, provided that the tanks, containers or vessels had been emptied of their previous contents prior to filling with the water. To the extent practicable, discharges should not contain free oil, hydrocarbons or other pollutants in other than trace amounts. No free oil shall mean that the discharge shall not create a visible sheen. Water that accumulates in storage tanks, containers or vessels as a result of rainfall, flooding or tidal surge may be discharged under the same conditions.

Appendix A sets forth guidance to operators of sanitary waste water treatment systems to aid in the return to compliant operations to prevent further damage to the environment and serious threats to life or safety throughout the Emergency Areas.

b. Discharges from Potable Water Treatment Systems

The discharge of pollutants from all potable water treatment systems is subject to the Louisiana Pollutant Discharge Elimination System (LPDES) General Permit for potable water treatment plants. Under ordinary circumstances, LDEQ requires the complete submission of a Notice of Intent to Discharge, evaluation and response from LDEQ prior to commencement of discharge.

However, to alleviate shortages of potable water in the Emergency Areas, authorization is hereby granted for new discharges of wastewaters associated with potable water treatment systems in the Emergency Areas, and the requirement for submission of a Notice of Intent to Discharge, evaluation and response from LDEQ is hereby waived. Any such discharges must comply with LPDES Permit LAG380000, Potable Water Treatment Plant General Permit. The effluent limitations and requirements set forth in the General Permit can be

viewed online at <http://www.deq.louisiana.gov/permits/lpdes/pdf/LAG380000.pdf>. A copy of the General Permit can be obtained by calling the Office of Environmental Services at (225) 219-3181.

Deadlines for monitoring and reporting requirements are addressed in Section 13 of this Declaration of Emergency and Administrative Order.

Authorization to discharge pursuant to this Declaration of Emergency and Administrative Order shall terminate upon the expiration of this Declaration of Emergency and Administrative Order. Any facility owner or operator requiring continued coverage under the General LPDES Permit subsequent to the expiration of this Order shall submit a Notice of Intent to Discharge from a Potable Water Treatment Plant to the Department by the expiration date of the Order. The application form, H2O-G, can be found at <http://www.deq.louisiana.gov/permits/lpdes/index.htm>, or by calling the Office of Environmental Services at (225) 219-3181.

Any owner or operator who commences discharge of pollutants from a portable potable water treatment unit pursuant to this Order shall submit written notification to the Office of Environmental Services at P.O. Box 4313, Baton Rouge, LA 70821-4313, within five (5) days of the commencement of the discharge.

c. Discharges from Temporary Housing Locations

Guidelines pertaining to sanitary discharges related to temporary housing sites are provided in Appendix B of this Declaration.

d. Gray Water Discharges

The Department hereby authorizes discharges of gray water within the Emergency Areas that comply with the requirements set forth in Appendix C.

e. Storm Water Discharges by U.S. Army Corps of Engineers

The Department hereby authorizes the U.S. Army Corps of Engineers to discharge storm water runoff from construction activities related to hurricane response activities in the Emergency Areas. Best Management Practices to avoid erosion and offsite transport of sediments are to be implemented to the greatest extent practicable. The Storm Water General Permit For Construction



Activities Five (5) Acres Or More (LAR100000) can be accessed on the LDEQ website ([www.ldeq.org](http://www.ldeq.org)) and contains applicable Best Management Practices for erosion and sediment controls in Part IV. Storm Water Pollution Prevention Plans.

f. Discharges from Construction and Demolition Debris Landfills

The discharge of pollutants to waters of the state from all construction and demolition debris landfills authorized pursuant to this Declaration is authorized provided the following conditions are met:

- Compliance with the Effluent Limitations and Monitoring Requirements for Discharges of Landfill Wastewater From a Construction/Demolition Debris and Woodwaste Landfill (See Appendix H)
- Compliance with the Effluent Limitations and Monitoring Requirements for Non-Contaminated Storm Water Discharges of Landfill Wastewater From a Construction/Demolition Debris and Woodwaste Landfill (See Appendix H)
- Reporting of monitoring and analytical information shall be in accordance LAC 33:IX. 2503 of the Water Regulations. Unless otherwise specified in this authorization, monitoring shall be conducted according to the analytical apparatus and materials, sample collection, preservation, handling, etc., procedures listed in 40 CFR Part 136, and in particular, Appendices A, B, and C (See LAC 33:IX.2531).

Authorization for initial dewatering of a pond/impoundment/pit to be utilized for disposal of construction and demolition debris in the Emergency Areas will be based upon the completion and submittal of the Pond Discharge Authorization Form (See Appendix I) to the Department for review and approval. The Department will provide a written response regarding the authorization to discharge from the pond/impoundment/pit. Please contact Mr. Lenny Young, Administrator of the Water and Waste Permits Division at 225-219-3181 or [Lenny.Young@la.gov](mailto:Lenny.Young@la.gov) for further information.

This discharge authorization terminates upon expiration of this Emergency Declaration. It may also be terminated at the discretion of the Department upon occurrence of any change or alteration at the site not specifically authorized by the Department. Additionally, this authorization is terminated upon any change at the facility which affects or has the potential to affect debris management operations or the discharge rate or composition of the effluent associated with those operations. Any facility owner or operator requiring continued coverage under the General LPDES Permit subsequent to the expiration of this Order shall submit a Notice of Intent to discharge from a construction and demolition debris landfill to the Department by the expiration date of this Order. The application form, C&D-G, can be found at <http://www.deq.louisiana.gov/permits/lpdes/index.htm>, or by calling the Office of Environmental Services at (225) 219-3181.

Any owner or operator who commences discharge of pollutants from a construction and demolition debris landfill pursuant to this Order shall submit written notification to the Office of Environmental Services at P.O. Box 4313, Baton Rouge, LA 70821-4313, within five (5) days of the commencement of the discharge.

**§ 2. Solid Waste Management**

a. Owners and operators of solid waste management facilities permitted by the Department before the Hurricane are authorized to make all necessary repairs to restore essential services and the functionality of stormwater management and leachate collection systems damaged by the Hurricane, without prior notice to the Department. Within thirty (30) days of commencing the work of such repair or replacement, however, the permittee shall notify the Department in writing, describing the nature of the work, giving its location, and providing the name, address, and telephone number of the representative of the permittee to contact concerning the work.

b. Uncontaminated Hurricane-generated debris consisting of trees, leaves, vines, twigs, branches, grass, and other vegetative matter may be

disposed of in permitted Type II or Type III landfills. On a case by case basis, the Department may authorize disposal of vegetative debris containing incidental, de minimus, or trace amounts of contamination in a Type II or III landfill.

c. Disposal or processing of any solid waste in or at unpermitted facilities or sites may be authorized by the Department on a case-by-case basis.

d. Uncontaminated construction and demolition debris may be disposed of in a permitted Type III landfill or a site that has been authorized by the Department for such disposal. For purposes of this Order, construction and demolition debris shall be the materials indicated in Appendix D of this Declaration. On a case by case basis, the Department may authorize disposal of construction and demolition debris containing incidental, de minimus, or trace amounts of contamination in a Type III landfill or a site that has been authorized by the Department for such disposal. Uncontaminated construction and demolition debris may be managed at a temporary staging area authorized by the Department. Uncontaminated construction and demolition debris that is mixed with other uncontaminated Hurricane-generated debris, such as white goods or household hazardous waste, should be segregated from other solid waste prior to disposal in a permitted landfill or authorized disposal site, except in cases where segregation is not practicable.

e. Ash residue from the combustion of yard trash or clean wood wastes may be disposed of in a permitted disposal facility, beneficially used in a manner authorized by the Department, or may be land spread in any areas approved by local government officials except in wellhead protection areas or water bodies.

f. Ash residue from the combustion of other Hurricane-generated debris shall be disposed of in a permitted Type II or Type III landfill, beneficially used in a manner authorized by the Department, or as otherwise specifically authorized by the Department. Metals or other non-combustible materials segregated from the ash residue may also be disposed of in a permitted landfill.

g. White goods (i.e., unsalvageable air conditioners, stoves and range tops, as well as refrigerators and freezers from which food has been removed) shall be stored in an area separate from other solid wastes and shall be stored in a manner that prevents vector and odor problems and shall be removed from the facility or staging area within ninety (90) days.

h. Putrescible waste (e.g., rotting food that has been removed from unsalvageable refrigerators and freezers) shall be disposed of in a permitted Type II landfill.

i. The disposal of excessive accumulations of small animal carcasses shall be in accordance with the Louisiana Department of Health and Hospitals sanitary code. The disposal of large animal carcasses (e.g. horses, cows) shall be in accordance with the instructions from the Louisiana Department of Agriculture.

j. Permitted landfills or transfer stations within or outside of the Emergency Area, which accept Hurricane-generated debris in accordance with the terms of this Order, may accept Hurricane-generated debris for disposal or storage without the need to first modify existing permits. Operators of landfills or transfer stations shall seek modifications of their existing permits to address any long-term impacts of accepting Hurricane-generated debris on operations and closure that are not addressed in existing permits. Long-term impacts are those that will extend past the expiration date of this Order. The requests for modification shall be submitted as soon as possible, but no later than the expiration date of this Order. No permit fee will be required for any modifications necessitated solely by the Hurricane clean-up activities.

k. Authorizations may be issued prior to or following a site inspection by Department personnel for staging areas to be used for temporary storage and chipping, grinding or burning of Hurricane-generated debris. Authorizations may be requested by providing a notice to the Department containing a description of the staging area design and operation, the location of the staging area, and the name, address, and telephone number of the site manager as described in

Department correspondence dated September 13, 2004, to the Parish Governing Authorities.

I. Construction and demolition debris generated from residential structures of four units or less that are subject to a government-ordered demolition, and that are assumed to contain potential asbestos-containing waste material (ACWM), shall be disposed of in a permitted Type I or II landfill or an “enhanced” construction and demolition debris (C&D) landfill that has been authorized by the Department in accordance with LDEQ requirements (Appendix J1). A request by a landfill owner or operator for authorization to accept such ACWM must include a certification that the owner or operator will manage the ACWM in accordance with the landfill's QA/QC plan and LDEQ requirements. See Section 6.a, *Asbestos Clean-up*, of this Order, for additional information on receiving ACWM in Type I and II Landfills, C&D Landfills, and “enhanced” C&D landfills. The Department will provide a written response to the request for authorization to accept solid waste and asbestos containing waste material in a Type I or II landfill, or a Type III landfill.

m. Waste Tires

The Secretary of the Louisiana Department of Environmental Quality finds that the unprecedented conditions resulting from Hurricanes Katrina and Rita has caused or contributed to an extraordinary drain on State of Louisiana resources and in particular the Waste Tire Management Fund (WTMF) provided for in La. R.S. 30:2418. Those conditions include the damaging and/or abandonment of approximately three hundred and fifty thousand (350,000) or more automobiles in the affected areas. Most of these vehicles will be salvaged or scrapped, with the four to five tires on each vehicle being sent for either disposal, resale, and or recycling. This sudden influx of waste tires and used tires into the system will result in an inordinate immediate drain on the WTMF and an inability to properly account for the diversion of tires to recycling projects and for resale. At the time of this declaration, Parish Collection Centers are accepting tires from debris collection activities, resulting in an immediate drain on

the WTMF. As a result of these conditions, the Secretary does hereby order the following:

i) All tires removed from vehicles within the affected areas that are salvaged and/or scrapped because of damage resulting from Hurricane Katrina shall be tracked and are ineligible for payment from the WTMF.

ii) All tires that are collected in the affected areas through hurricane debris collection activities and deposited at Parish Collection Centers will be ineligible for payment of the WTMF subsidy, but are to be treated as debris under existing debris removal programs. Tires presently on site at Parish Collection Centers must be classified for either recycling under existing approved beneficial uses, or for resale. Any person who claims for resale any tires from salvaged or scrapped vehicles in the affected area shall report to the Department the number of such tires classified for resale, and their destination, within fifteen (15) days.

iii) All tires that are removed from automobiles in the affected area that are destined for salvage because of damage resulting from Hurricane Katrina must be collected, transported, and either recycled or disposed of with an accompanying manifest that lists the tires as being ineligible for the WTMF. If the tires are deemed "used tires" for resale, such a declaration must be reported to the Department by the person responsible for removal of the tires from the vehicle being scrapped and or salvaged. The report must contain the VIN number of the vehicle being scrapped and or salvaged, the number of tires being removed, the number being classified for resale, and the number classified for recycling and/or disposal.

iv) Eligibility of tires for the WTMF subsidy shall be governed by the most current version of this document, and prior versions of this document are hereby superseded.

**§ 3. Hazardous Waste**

Hazardous waste generated as a result of the hurricane event must be separated from other hurricane generated waste and disposed of at a permitted hazardous waste disposal facility. Household wastes collected during this event, which are exempt from the regulatory requirements applicable to hazardous wastes, must be managed not only in an environmentally sound manner but also in accordance with the appropriate LDEQ rules and regulations governing the storage and processing of this type of waste.

**§ 4. Open Burning**

a. The Department authorizes local governments or their agents to conduct the open burning of Hurricane-generated trees, leaves, vines, twigs, branches, grass, and other vegetative debris within or outside of the Emergency Area, without prior notice to the Department and provided that the provisions of LAC 33:III.1109.D.6. are met. This Order does not authorize any other outdoor burning of non-listed debris streams. Within seven (7) days of commencing any such burning, the local government or its agent shall notify the Department in writing, describing the general nature of the materials burned, stating the location and method of burning, and providing the name, address, and telephone number of the representative of the local government to contact concerning the work and the anticipated duration of the burning event. This Order does not relieve the local government or the agent from any requirement to obtain an open burning authorization from any other governmental entity empowered to grant such authorizations. Notwithstanding the provisions of this paragraph, the burning of asbestos-containing materials or hazardous waste is prohibited.

b. The Department will consider, on an individual basis, requests for approval for open burning, by persons other than local governments or their agents, of Hurricane-generated trees, leaves, vines, twigs, branches, grass, and other vegetative debris. Any such burning approved by the Department must be conducted in compliance with the requirements of LAC 33:III.1109.D.6.

**§ 5. Air Pollution Sources Other than Open Burning**

a. The Department authorizes the minor repair of any previously permitted stationary source of air pollution that was damaged by the Hurricane to restore it to its previously permitted condition without prior notice to the Department. Within thirty (30) days of commencing such repairs, however, the permittee shall notify the Department in writing, stating the location and nature of the work and providing the name, address, and telephone number of the representative of the permittee to contact concerning the work. Minor repairs are repairs that would not constitute reconstruction under any definition of 40 CFR Part 60, 61 or 63 and that could not affect potential to emit any pollutant. Repairs that would constitute reconstruction under any definition of 40 CFR Part 60, 61 or 63, or repairs that could affect potential to emit any pollutant are not authorized by this Order.

b. The Department will consider, on an individual basis, requests for approval for the following sources of air pollution:

i) temporary air pollution control devices, such as portable flares, used for vessel and pipeline segment purging and the limited operation of facilities with damaged vapor control equipment;

ii) portable storage tanks, used for interim storage while damaged equipment is being repaired; and

iii) repairs, other than the minor repairs addressed in Section 4.a above, of permitted stationary sources that have been damaged by the hurricane, provided that the sources are restored or replaced with equipment that is identical or the functional equivalent, to meet permit conditions.

c. The throughput of any temporary gasoline storage vessels used exclusively for providing gasoline to employees of the tank operator will not be counted toward the annual or thirty (30) day average throughput for purposes of determining the applicability of control requirements under LAC 33:III.2131. This subparagraph applies only to gasoline provided to employees at or below the operator's cost. This subparagraph does not exempt the operator from any other



applicable regulatory requirements, specifically including, but not limited to, the spill prevention and control requirements of the Louisiana Water Quality Regulations (LAC 33:IX).

d. LAC 33:III.507.J.2 provides that an upset condition constitutes an affirmative defense to an action brought for noncompliance with technology-based emissions limitations. LAC 33:III.507.J.2.d requires the permittee to notify the Department no later than two (2) working days after the time emissions limitations were exceeded due to the upset. Because of the circumstances caused by the Hurricane and the need to apply facility resources to quickly repair and correct conditions caused by the upset, the Department extends the notification requirement referenced above to seven (7) days.

#### **§ 6. Asbestos Clean-up**

a. The Department waives the requirement for prior notification for emergency demolition or emergency cleanup of asbestos-containing material resulting from the Hurricane. Within one (1) business day of commencing such demolition or cleanup, however, the person responsible for such work shall notify the Department in writing. The notification shall be submitted on the Asbestos Notification of Demolition or Renovation Form AAC-2, which may be found at <http://www.deq.louisiana.gov/portal/Portals/0/permits/AsbestosandLead/AAC-2%20Asb%20Not%20Form%20022106.doc>. The procedures in LAC 33:III.5151 (demolition/renovation) and LAC 33:III.Chapter 27 (accreditation and training requirements) for handling asbestos-containing material shall be complied with during demolition, cleanup, transportation, and disposal, except as otherwise provided herein. Construction and demolition debris generated from residential structures of four units or less that are subject to a government ordered demolition and that are assumed to contain potential asbestos-containing waste material shall be disposed of in a permitted Type I or II landfill or an “enhanced” C&D landfill that has been authorized by the Department in accordance with LDEQ requirements (Appendix J). An owner or operator of a Type III landfill seeking to operate as an “enhanced” C&D landfill shall complete and submit the

Asbestos Landfill Recognition Form AAC-7, which may be found at <http://www.deq.louisiana.gov/portal/Portals/0/permits/AsbestosandLead/AAC-7%20IS-Asb%20Landfill%20In%20State%20Form%20121305.doc>. An owner or operator of a C&D landfill receiving non-regulated Category 1 and 2 ACWM only must also submit the AAC-7 form. The Department will provide a written response to any request for authorization for a Type I or II landfill to dispose of asbestos containing waste material or a Type III landfill to operate as an “enhanced” C&D landfill. Burning of asbestos-containing material is prohibited.

b. Any person handling debris or conducting activities associated with the renovation or demolition of residential structures of four (4) units or less that are subject to government-ordered demolition must comply with the USEPA’s No Action Assurance letters dated February 3, 2006, and February 24, 2006, respectively, and the LDEQ guidance contained in Appendix J.

c. The Department waives the requirement pursuant to LAC 33:III.2799.E.2.b.ii, that applicants receiving training from providers not recognized by the state of Louisiana also submit proof of training in current Louisiana asbestos regulations (see LAC 33:III.2799.F.5.g).

d. The Department waives the requirement pursuant to LAC 33:III.2799.F.5.c.i that recognized asbestos Training Providers give the Department notice at least five (5) days prior to class commencement. (Notification must be made at least three (3) days prior to a course when only the state regulations are to be taught.) Notice shall be provided to the department within 24-hours of class commencement.

e. Local education agencies and state government may make emergency use of a building as a school or state building. The agency making use of the building may request an extension of the deadline to inspect the building within four (4) months of the decision to use the building pursuant to LAC 33:III.2707.A.2.

f. The Department waives the requirement pursuant to LAC 33:III.2723.A.2 that the local education agency or state government must submit a management plan prior to any building’s use as a school or state building. A

management plan shall be submitted within six (6) months of the initial use of the building.

g. In addition to the qualifications established by LAC 33:III.2799.D.3, the Department may accredit as an “abatement project designer” any individual who:

i) has a Bachelor of Science in a related scientific field with five (5) years experience as a Contractor/Supervisor working under the direction of a Louisiana Accredited Project Designer, planning and implementing asbestos abatement projects;

ii) has at least ten (10) years experience as a Contractor/Supervisor working under the direction of a Louisiana Accredited project Designer, planning and implementing asbestos abatement projects; or

iii) has completed an application developed by the Department, and received signatures from two (2) Louisiana accredited Project Designers indicating that the applicant has the knowledge and skills to perform this type of work.

h. The fee charged for the Emergency Processing of Worker Accreditation for Asbestos (i.e., LAC 33:III.223, Fee #2070) shall be reduced to \$66.00 (i.e., the same fee as for normal processing, Fee #2060).

i. The fee charged for the Emergency processing of Asbestos Notification of Demolition and Renovation Form AAC-2 (i.e. LAC 33:III.223, Fee code # 2030) shall be reduced to \$66 (sixty-six dollars) for Hurricane related demolition of residential structures of four (4) units or less, subject to a government ordered demolition.

j. The Department shall generate a single Asbestos Disposal Verification Form (“ADVF”) per day, per landfill, per contractor for use with multiple loads of C&D debris that contains asbestos containing waste material, notwithstanding any provision to the contrary in LAC 33:III.5151.F.2.g. The Department will also generate a blank “Addendum to ADVF for Transportation

and Disposal of AWCM,” which will accompany the ADVF and which is to be completed and signed by the contractor and landfill operator. Detailed instructions and a sample Addendum are available on the Department’s Website under Asbestos Accreditation and Notification Forms on the Asbestos and Lead web page at <http://www.deq.louisiana.gov/portal/Default.aspx?tabid=2251>, or by contacting the Asbestos and Lead Section at 225-219-3032.

**§ 7. Underground Storage Tanks**

Before placing any hurricane impacted Underground Storage Tank (UST) system back in operation, and no later than ninety (90) days after hurricane related conditions permit, the owner and/or operator shall perform an emergency evaluation of the UST system. The evaluation shall consist of, at a minimum, a general inspection of the UST system, followed by performing the start up protocol contained in Appendix E, “Plan For Evaluating Underground Storage Tank Sites Impacted by Hurricane Katrina,” dated September 19, 2005. Before placing fuel into any UST system that has been damaged or has sustained a release, the owner/operator must repair or replace the UST system, perform precision tank and line tightness tests and leak detection system tests, and provide a fully functional corrosion control system.

During the time that the UST system is not accessible due to conditions resulting from the hurricane, the owner/operator of the UST system is relieved of the requirements for release detection, corrosion protection, and inventory control. Each owner/operator shall report any suspected UST releases to the Department within seven (7) days of gaining knowledge of the suspected release, unless an emergency condition makes it impossible for the owner/operator to do so, in which case the owner/operator shall report the suspected release to the Department as soon as he/she is able. All recordkeeping requirements for inoperable systems are suspended during the time of this emergency declaration. During the time of this declaration, in the areas affected by the hurricane, non-compliance with release detection, corrosion protection, and inventory control for UST owners and operators will not

constitute non-compliance for purposes of the deductibles enumerated in La. R.S. 30:2195.10.

**§ 8. Special Waste (Reuse and Recycle)**

Every effort should be made to minimize the disposal of reusable and recyclable material in landfills. Diversion, composting and recycling debris are priorities. Debris handlers should make every effort to properly handle and recover debris materials that have reuse value, are recyclable or the release of which into the environment would be detrimental or is prohibited, e.g. used motor oil. Appendix F lists special waste from specific sources (households, businesses, schools, public buildings, automobiles and boats) and references the FEMA Debris Plan, which provides information intended to assist operators of solid waste facilities, recycling centers, scrap metal dealer, local governments, and contractors in handling of certain debris from the Emergency Areas.

**§9. Public Notice and Public Participation Procedures Regarding Proposed Permit Actions**

Appendix G provides special procedures for public notice and public participation regarding proposed permit actions in the Emergency Areas.

**§ 10. General Conditions**

a. This Emergency Order does not convey any property rights or any rights or privileges other than those specified in this Order.

b. This Emergency Order only serves as relief for the duration of the Order from the regulatory and proprietary requirements of the Department, and does not provide relief from the requirements of other federal, state, and local agencies. This Order therefore does not negate the need for the property owner or facility operator to obtain any other required permits or authorizations, nor from the need to comply with all the requirements of those agencies.

**§ 11. General Limitations**

The Department issues this Emergency Final Order solely to address the emergency created by the Hurricane. This Order shall not be construed to authorize any activity within the jurisdiction of the Department except in accordance with the express terms of this Order. Under no circumstances shall anything contained in this Order be construed to authorize the repair, replacement, or reconstruction of any type of unauthorized or illegal structure, habitable or otherwise.

**§ 12. Other Authorizations Required**

Nothing in this Order shall eliminate the necessity for obtaining any other federal, state, or local permits or other authorizations that may be required.

**§ 13. Extension of Time to Comply with Specified Deadlines**

For facilities regulated by the Department in the Emergency Area, this Order extends the time for a period of thirty (30) days to comply with the following specified deadlines that occur between August 28, 2005, and the expiration of this Order:

a. The time deadlines to conduct or report periodic monitoring required by permits, other authorizations, enforcement actions, or settlement agreements, except for monitoring required by air permits issued under Title IV or V of the Clean Air Act or under the PSD program;

b. The time deadlines to file an application for renewal of an existing permit, except for air permits issued under Title V of the Clean Air Act.

**§ 14. Completion of Authorized Activities**

a. All activities authorized under this Emergency Order must be commenced before the expiration of this Order unless otherwise provided in an authorization or permit. The deadline for commencement under any authorization or permit issued under this order may be extended on a showing that contractors or supplies are not available to commence the work, or if additional time is needed

to obtain any required authorization from the Federal Emergency Management Agency, the U.S. Army Corps of Engineers, or other local, state, or federal agencies.

b. A blanket approval of time extensions under Louisiana Administrative Code 33:V.1109.E.2 is necessary within the Emergency Areas for hazardous waste generators and small quantity generators for the storage of their hazardous wastes on site, pending the cleanup of the Hurricane damage and restoration of essential services. The rules authorize a thirty (30) day extension because of unforeseen and uncontrollable circumstances. The specific effects of the Hurricane were unforeseen and uncontrollable. Therefore, to avoid having to issue a potentially large number of individual approvals on a case-by-case basis and waste limited agency resources during the time of emergency, the Department authorizes a general extension of time of thirty (30) days from the expiration of this Order for all such hazardous waste generators and small quantity generators for the storage of their hazardous wastes on site, in the parishes within the Emergency Areas, and where their ninety (90) day accumulation period expires within the term of this Order.

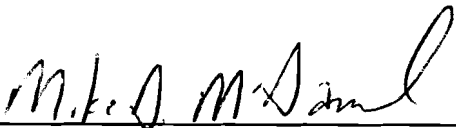
**§ 15. Amendments**

This Order may be amended as required to abate the emergency.

**§ 16. Expiration Date**

This Fifth Amended Declaration of Emergency and Administrative Order shall take effect immediately upon execution by the Secretary of the Department, and shall expire in sixty (60) days from the date of execution set forth below, unless modified or extended by further order.

**DONE AND ORDERED** on this 31<sup>st</sup> day of March, 2006, in  
Baton Rouge, Louisiana.

  
\_\_\_\_\_  
Mike D. McDaniel, Ph.D. Secretary

## APPENDIX A

### GUIDANCE PROTOCOL FOR SANITARY WASTE WATER TREATMENT SYSTEMS

The following protocol is intended to assist operators of sanitary waste water treatment systems in the Emergency Area in start up and operation.

#### 1. **Access**

Entrance to the treatment plant should be considered only after flood waters have receded enough to allow safe operation of the treatment plant including the safe conditions for staff. Accessibility to treatment plants in restricted areas may need to be cleared with the Office of Emergency Preparedness. Contact the Department (SPOC 225-219-3640) if assistance in gaining access to the treatment plant is required. The use of sound personal protective equipment for safety in unsanitary or unsafe conditions is required. Early return to compliant operation minimizes long term problems within the entire wastewater system.

#### 2. **Power Supply**

For use of generator power, arrange for a reliable and continual fuel source. Contact the Department (SPOC 225-219-3640) if assistance in obtaining fuel for power generation at your treatment plant is needed. If no generation is available and you must wait for electrical providers; consider notification to residents of the effect on collection lines. If removal of clean out plugs is needed to prevent back up into homes, notify affected customers warning them to remain clear of these areas. If pump trucks are used, LDEQ can advise of locations to dispose of the pumped sewage.

#### 3. **Start Up**

Once it is safe, re-power the treatment system, aerators and pumps. The primary goal is to remove sanitary wastewater from contact with humans, while making every effort to do so in a manner that is practical and least impacting on the environment. Activate disinfection units and maintain them. Initial effluent will likely be poorly treated and of a very poor quality. Adequate disinfection will be important to protect human health downstream of the discharge. If the system has been down and/or without power for an extended period of time, resident bacteria used in the treatment process may need to be re-established. Consider reseeded the system with activated sludge from operating aerated treatment plants. Several treatment plants are available for use in reseeded. Contact the Department for information regarding system seed sources.



#### **4. Monitoring**

Watch plant operations carefully to confirm it is functioning properly. Ensure that lift stations within the collection system are functional. Without functioning lift stations, sewage is not being removed from residences and sent for treatment. Visually observe effluent to maximize treatment effectiveness in the short term. If simple tools and/or tests are available to diagnose the plant's operational status ("sludge judge", settle-o-meter, dissolved oxygen meters, BOD analyses) use them frequently. If your plant is discharging poorly treated sewage, consider the impacts to persons, fish and wildlife downstream, including the possibility that drinking water intakes may be located downstream of your effluent. Notification to downstream users may be necessary to protect human health. Sample and analyze your effluent per LPDES requirements as soon as you are able.

#### **5. Notifications and Documentation**

Discharges that result in emergency conditions (threat to human health and the environment) must be reported immediately (1-877-925-6595). Discharges that result in emergency conditions (threat to human health and the environment) may require notification to affected persons. Report to the Department any discharges that interfere with downstream uses, such as swimming or drinking water sources or if fish kills occur. Discharge Monitoring Reports (per permit requirements) should be used to notify the Department of non-emergency conditions. Notification to sewage users may be necessary if problem with the system prevents removal of sewage from residences (or other human contact) on an on-going basis. Notification to downstream users may be necessary to protect human health. Notify the Local Office of Emergency Preparedness when hurricane damage repairs are known – Federal Emergency Management Agency (FEMA) may be able to help with costs associated with hurricane damage.

A permittee who wishes to establish the affirmative defense of upset must document the cause of the upset, that the facility was being properly operated at the time of the upset, that notice of the upset that exceeded effluent limitations was submitted to the DEQ and that the permittee took all reasonable steps to minimize or prevent the likelihood of adversely affecting human health or the environment.

#### **6. Records Management**

Hard copy or electronic copies of files associated with environmental issues for your facility may be available at the Department. Files destroyed by the hurricane can be obtained by the Responsible Persons for your system from the Department free of charge. Please contact Records Management at (225) 219-3172 or online at <http://www.deq.louisiana.gov/pubRecords/>.

## APPENDIX B

### TEMPORARY HOUSING SITE SELECTION

#### Initial Screening

##### **Sanitary Wastewater**

- Attempts must be made to route sanitary wastewater to an existing wastewater collection system or wastewater treatment system whenever feasible. This option requires no permitting action or approval from the Department. However, the primary FEMA contractor shall notify the Department, in writing, of any such discharge to an existing waste water collection system.
- If a point source discharge is to be made into waters of the state, identify the effluent route to the first named waterbody (a waterbody that is readily recognizable).
- Avoid discharge into a drainage system that goes through or next to a sensitive area. Sensitive areas include, but are not limited to: drainage behind a subdivision, school, or park; drainage that routes the effluent through a private pond or private property; or discharge into a designated outstanding natural resource waterbody.
- If feasible, route effluent to the Mississippi River, or through local drainage to the Mississippi River. If not possible, route effluent directly into the largest waterbody in the vicinity, or into the waterbody's drainage system as close as possible to the waterbody.
- Mobile homes will be rated at 250 gallons per day per mobile home. Travel trailers will be rated at 125 gallons per day per trailer. If washing machines will be made available outside of the mobile home or travel trailer (in a washateria) 800 gallons per day per washing machine will be factored into the allowable capacity. Any combination of the above should be utilized to determine overall gallons per day per site.
- All single point source discharge into waters of the state should be limited to 100,000 gallons per day in order to qualify for rapid coverage under the Louisiana Pollutant Discharge Elimination System General Sanitary Permit. Discharges in exceedence of 100,000 gallons per day will be evaluated by the Department on a case by case basis in compliance with water quality standards of the receiving waterbody.

## **Waste**

- If feasible, select site that is an existing development, such as, an existing mobile home park, or a site that has existing infrastructure that can be utilized.
- Research existing databases and make on-site physical observations for former municipal waste sites, abandoned hazardous waste sites, former underground storage tank remediation sites, etc. These are areas should be avoided as locations for staging or locating temporary housing.

## **Notification after Initial Screening**

- After the initial screening, notify the Department and provide the following information:
  - Location – site name, physical location (911 address if available) and coordinates (i.e. latitude and longitude) shall be provided.
  - Identify the method of wastewater treatment or management. Notification must be made of connection to an existing wastewater collection system or treatment system (provide name of system); collection for off-site disposal (provide disposal name/location); or treatment and discharge to surface waters of the state.
  - If proposal is to discharge to surface waters from a treatment system that did not previously discharge at the proposed location, provide an estimated design flow (based on numbers above) and the effluent discharge route to first named waterbody. (Ex. unnamed ditch, to LA Hwy 19 ditch, to unnamed creek, to White's Bayou, to the Comite River.)
- Notification must be made to the Department at P. O. Box 4313, Baton Rouge, LA 70821-4313 or by fax at (225)219-3309 attention Mr. Lenny Young, Administrator, Water and Waste Permits Division.
- Following notification as provided in this section, the Department will provide comments on the proposed site.

## **Storm Water Permit Prior to Construction**

- If dirt work is going to be required at the site, a stormwater general permit for construction may be required.
- If the area to be developed is less than one (1) acre, coverage under a stormwater general permit is not required.

- If the area to be developed is at least one (1) acre but less than five (5) acres, coverage under Construction General Permit, LAR200000, will be required. A Notice of Intent (NOI) is not required to obtain coverage under this permit. However, a storm water pollution prevention plan (SWPPP) must be prepared and implemented at the time construction begins. A copy of the permit is available at <http://www.deq.louisiana.gov/permits/lpdes/pdf/LAR200000.pdf>. A Notice of Termination (NOT) is required when construction is complete.
- If the area to be developed is five (5) acres or greater, coverage under the Construction General Permit, LAR100000, will be required. Submittal of a NOI (CSW-S) is required prior to commencement of construction. The NOI can be found at <http://www.deq.louisiana.gov/permits/lpdes/csw-g.doc>. A copy of the general permit can be found at <http://www.deq.louisiana.gov/permits/lpdes/pdf/LAR100000.pdf>. Submission of an NOT is required when construction is complete.
- Close attention must be given to the Historic Preservation sections of each of the construction general permits for any construction at previously undeveloped sites.
- Coverage under the construction general permits is necessary prior to construction. However, authorization to discharge as described is not required before construction, but is required before the discharge begins.

### Registration for Authorization for Direct Discharges

- For discharges totaling less than 100,000 gallons per day, a Notice of Intent (NOI), form WPS-G, must be submitted to the Department at the above address. The NOI is available at <http://www.deq.louisiana.gov/permits/lpdes/wps-g.doc>. A copy of LPDES Sanitary General Permits are available on the Department's web site at <http://www.deq.louisiana.gov/permits/lpdes/lpdesgenpermits.htm>.
- Proposed discharges greater than 100,000 and particular discharges going directly into the Mississippi may be granted authorization to discharge under an Administrative Order or an individual LPDES permit on a case-by-case basis. If an Administrative Order is granted, application for a permit shall be made to the Department within thirty (30) days. Please contact the Department for additional information if this applies to your site.
- Contact for coverage under a Sanitary General Permit can be made to Tom Killeen, Manager Municipal and General Permits Section @ (225) 219-3181 or by e-mail at [tom.killeen@la.gov](mailto:tom.killeen@la.gov).
- For FEMA temporary housing sites, the primary FEMA contractor shall apply for and be the responsible entity for the permit, operation, maintenance and reporting requirements to LDEQ.

## Additional Recommendations for the Housing Sites

### **Water**

- Wastewater treatment plants (WWTP) must be operated by a certified operator.
- WWTP's must be properly operated and maintained at all times.
- Disinfection of effluent must be provided.
- Permittee should implement a program to inform residents of things that might be harmful to the WWTP such as the introduction of grease or large amounts of household chemicals to the treatment plant.

### **Waste**

- Provide for collection and disposal of solid waste.
- Provisions should be made for proper disposal of household hazardous waste during the operation of the facility and as residents leave the facility.
- It is recommended that the residents be informed on the benefits and requirements of proper disposal of solid waste and household hazardous waste.

### **Recycling**

- Whenever feasible, provide for recycling, such as, providing a recycling center on site with appropriate recycle containers.
- Inform residents on the proper procedures for recycling household materials.
- Recycling incentives for residents can prove beneficial.

### **Open Burning**

- Open burning at these sites should be prohibited. This does not include charcoal or gas grills.

## **Site Closure**

- Once all the residents have left, the site must be closed.
- All solid and household hazardous waste shall be removed and properly disposed.
- If a WWTP was used for treatment of sanitary wastewater, it shall be removed. A request for termination of coverage under the permit or Administrative Order issued for coverage must be submitted to the Department.
- Notification of closure must be made to the Department. The Department will approve the site for closure.

## **APPENDIX C**

### **REQUIREMENTS FOR THE CONDITIONAL AUTHORIZATION OF DISCHARGES OF GRAY WATER TO SURFACE WATERS OF THE STATE OF LOUISIANA**

For purposes of these requirements, gray water shall be defined as wastewaters from all fixtures except toilets, including but not limited to wash waters from kitchen, bathroom, and laundry sinks, tubs, and washers.

Unless the Department gives written notice to the contrary, gray water discharges to surface waters of the State, within the Emergency Areas, are hereby authorized, if the following requirements are met:

- Attempts must be made to route gray water to an existing wastewater collection system or wastewater treatment system whenever possible.
- Discharges of gray water shall be made directly into a ditch, drainage or waterbody where feasible.
- Human contact with gray water discharges shall be avoided to the greatest extent possible.
- Surface application of gray water shall not be used for irrigation of food plants.
- The discharge of gray water may not contain human waste or any chemicals derived from activities such as cleaning car parts, washing greasy or oily rags, disposing of waste solutions, or soiled or infectious garments.
- The application of gray water shall be managed to minimize standing water on the ground surface.
- Any gray water storage tank must be covered to restrict access and to eliminate habitat for mosquitoes or other vectors.
- The Louisiana Department of Health and Hospitals, Office of Public Health, has given written authorization for the discharge.

## **APPENDIX D**

### **HURRICANE GENERATED MATERIALS ALLOWED AT A PERMITTED CONSTRUCTION AND DEMOLITION DEBRIS (C&D) LANDFILL OR DEPARTMENT AUTHORIZED SITE**

The following hurricane generated materials shall be allowed for disposal at a permitted construction and demolition debris (C&D) landfill or a Department authorized site:

- Nonhazardous waste generally considered not water-soluble, including but not limited to metal, concrete, brick, asphalt, roofing materials, sheet rock, plaster, lumber from a construction or demolition project, and other building or structural materials;
- Furniture, carpet, and painted or stained lumber contained in the demolished buildings;
- The incidental admixture of construction and demolition debris with asbestos-contaminated waste. (i.e., incidental asbestos-contaminated debris that cannot be extracted from the demolition debris); and
- Yard waste and other vegetative matter.

The following materials shall not be disposed in a construction and demolition debris landfill, but segregated and transported to a Department approved staging area for eventual management, recycling and/or disposal at a permitted Type II Landfill, unless segregation is not practicable:

- White goods
- Putrescible Waste



## **APPENDIX E**

### **PLAN FOR EVALUATING UNDERGROUND STORAGE TANK SITES IMPACTED BY HURRICANE KATRINA**

#### **PROBLEM DEFINITION**

On August 29, 2005, Hurricane Katrina struck Louisiana causing widespread damage within a ten (10) parish region surrounding and within the greater New Orleans area. The specific effects of Hurricane Katrina were unforeseen and uncontrollable; and emergency conditions (threats to human health and the environment) persist. Underground Storage Tank (UST) sites have been impacted by flood waters which will require actions be taken to place these sites back into operation. Steps necessary to place the site into operation are being outlined to ensure that new releases do not occur and if releases are identified in this process that they are properly addressed. The focus of this effort will be to place these sites into operation while ensuring protection of human health and the environment.

#### **BACKGROUND**

Flooding and damage related to Hurricane Katrina has raised many issues regarding Underground Storage Tank site status. Damage to UST systems as well as remediation systems is expected. The impact of this damage must be evaluated to determine what steps are necessary to place these sites back into service.

In the six (6) parishes that suffered the most severe damage due to the storm (Jefferson, Orleans, Plaquemines, St. Bernard, St. Tammany and Washington parishes) approximately 848 active UST sites are known to be present with approximately 2543 underground tanks. A number of these sites have either been damaged or flooded.

Damage that occurs to UST systems generally results from: the buoying up of tanks which are partially full or empty, water entering the tanks and displacing product, failure of underground piping as a result of stresses induced by groundwater pressures or debris, and damage to electrical systems from extended contact with water. Additionally, another route of infiltration exists if the level of floodwaters exceeds the top of the vent lines. Regulated UST's which are weighted down with fuel or anchored by other means (deadmen or attached to an underlying pad) and have properly installed and tightened filler caps and vapor recovery port caps should sustain little impact, even after being submerged for days.

Tanks in which fill caps are not tightened will fill with water and then spill product, some of which may percolate into shallow soil. Empty or near-empty tanks will float up, destroying overlying concrete/asphalt and distribution lines, also spilling product. In these situations, it is expected that the entire UST system would require replacement.

Presently, the extent and magnitude of damage to UST systems themselves and to the shallow subsurface environment as a result of Hurricane Katrina is unknown. At this time the primary objective is to put these systems back into proper service to meet the fuel supply need of initial and subsequent response efforts. Later, as time and resources permit, assessment and remediation of any environmental impacts will take place.

## **UNDERGROUND STORAGE TANK EVALUATION**

Underground Storage Tank sites flooded by the hurricane must be evaluated to determine response actions necessary to place these UST facilities back into service and protect human health and the environment. New product should not be placed in the tanks if there are indications that the integrity of the tank has been comprised when performing the activities outlined below.

### **General Information:**

UST Owners/Operators will be responsible for evaluating underground storage tank systems to determine if they are suitable for receiving product. Flooded systems that are **determined to be suitable for receiving product** may be put back into service and should have an integrity test performed as soon as contractors and services become available to perform the testing and no later than six (6) months after product was first placed into the tank after flooding. If the tank inspection outlined below (or subsequent monitoring of the tank), indicates that the system has been comprised; **the system should be taken out of service** and repaired or replaced as necessary and an integrity test performed prior to again putting the system into operation.

The Department has established a contact telephone number to be used by contractors and citizens for reporting exigent conditions and for questions concerning problems with UST systems. This UST "hotline" will be manned by agency staff to assist the regulated community. The UST hotline number is (225) 219-3406 (Department's 5<sup>th</sup> floor receptionist). These procedures for contractors are being provided to tank owners, tank removal and installation contractors, response action contractors and trade groups that represent the industry such as Louisiana Oil Marketers Association and Louisiana Mid-Continent Oil and Gas Association. This information will also be posted on the Department's Web Site.

### **General Evaluation Protocol for Contractors:**

No equipment should be turned on prior to examination. Check all electrical panels and make sure they are clean and dry. All equipment related to electric power service should be inspected and any necessary repairs should be made prior to power restoration. This includes all fueling systems, leak-detection devices and corrosion prevention (impressed current) equipment. The electrical system should be checked for

continuity and shorts (pumps, turbines, dispensers, ATG consoles, emergency shutoff, panel box, etc.)

Specifically, all electrical junction boxes and dispenser heads should be opened, inspected and dried if necessary. Conduits should be inspected for the presence of water, insulation damage, shorts or opens. Conduits exhibiting water should be dried or vacuumed as appropriate and all defective wiring should be replaced. To apply electrical power to a UST system before conducting basic examination could be extremely dangerous.

Submerged pumps and dispensers should not be operated if there is the possibility of water entering into the system as pumping water may damage hydraulic components.

#### Technical Protocol for Contractors:

These protocols should be followed to place tanks back into service:

1. Stick tanks using water finding paste or read automatic tank gauge system, if operable, to determine whether water has entered the UST.
2. Flooded or water impacted tanks and all lines may need to be drained of water and dirt/mud or perhaps pumped dry and cleaned as conditions warrant. Liquids removed must be properly handled and disposed.
3. Interstitial spaces of tanks and lines of double walled systems, if flood-impacted, will need to be drained and flushed where possible. Blockage of interstitial spaces will render leak detection useless. Depending on the level of residual contamination at the facility, certain leak detection methods may no longer be viable. Tanks with brine or vacuum interstitial sensors may be returned to service if brine or vacuum levels are normal. Be prepared to update damaged leak detection equipment after emergency conditions are abated.
4. All facility sumps, pans, and spill buckets need to be pumped dry and cleaned. Replace sump lid gaskets if applicable. If sump lids are missing, replace with new water tight lids. Replace sumps and spill buckets that fail to prevent water intrusion after initial cleaning and drying.
5. Check tank bottoms for water and debris. Remove and dispose as appropriate (see item #2 above).
6. Check deflection of fiberglass tanks. If deflection is greater than manufacturer's specification (general guideline is 2%) call the manufacturer for instruction.
7. If tanks shifted and problems are found, **repair or replace them** according to manufacturer's instructions and appropriate industry standards and regulations. Obviously, these **systems should be shut down and not receive fuel** until they are deemed safe for reuse (tightness tested).
8. Check vents for movement, cracking, blockage and proper operation.

9. Check dispenser filters and submersible check-valve screens for plugging with dirt or mud.
10. Flush dispensers and UST system if necessary. Collect fluids for proper disposal.
11. Check critical safety devices (e.g., emergency power off controls, line leak detectors, air compressor pressure limiters, shear valves, stop switches, isolation relays on dispensers, etc.). Shear valves may be salvaged if they can be cleaned and lubricated with corrosion preventative. Some will still have to be replaced.
12. Sump sensors may need to be replaced after emergency conditions cease.
13. In-tank pumps, Automatic Tank Gauge (ATG) probes, overfill devices, automatic line leak detectors, fill and vapor dust caps, etc. should be assessed. Assess their condition after cleaning and replace as necessary.
14. ATG consoles and any associated electronics that are not submerged, should have a programming and operability check performed by a certified technician after emergency conditions cease.
15. After emergency conditions are abated, submerged Corrosion Protection (CP) rectifiers and associated aboveground equipment protecting tanks and/or lines may have to be replaced. If not submerged have a National Association of Corrosion Engineers (NACE) certified professional perform an operability check of the equipment. Inspect CP lines in saw cuts for damage and replace as necessary. If CP systems are out of service for an extended period of time perform integrity assessment of affected component before placing CP system back into service. A NACE certified professional will be helpful assessing the CP system.
16. Check accessible fittings, valves and miscellaneous piping for damage and corrosion. Clean and replace as necessary.
17. Document all inspection, assessment and repair activities at each UST system site. Provide this information to the Department in stand-alone report format within ninety (90) days of initiation of operations of that UST facility.
18. Submerged dispensers will have to be replaced or repaired as necessary. This includes the hanging hardware. Any suction system dispensers will probably have flood impacted motors and pumps and may need complete replacement.

#### General Protocol Upon Resumption of Service:

Depending on the level of residual contamination at the facility, certain leak detection methods may no longer be viable. Daily inventory control (with strict record keeping) may be the short-term leak detection method by necessity. Daily checks for water with water-finding paste should be done for several days until it has been determined that the system is tight. If these daily water checks indicate excessive water or the daily inventory control shows loss of product, **the tanks should be**

**emptied of product and use of the tanks should cease.** Notification of these conditions should be made to the Department's UST hotline ((225) 219-3406) as soon as practical.

Post Start-Up Protocol for Contractors:

This protocol should be followed once flood-impacted tanks have been placed back into service and emergency response and restoration have been completed or as otherwise directed by the Department:

Precision tightness test tanks, lines and interstitial spaces (after emergency conditions abate). Assess interstitial spaces for blockages, especially if used for leak detection. Decisions regarding replacement of tanks and lines should be made based on outcome of these tests. Department field staff should be consulted on these decisions whenever possible. Cathodic protection systems should be checked to make sure they are connected and operational.

These actions are being delayed in an effort to expedite fuel delivery capabilities and due to unavailability of sufficient contractors to perform the otherwise required work in a timely manner. All leak detection equipment must be put back into operation as soon as practically possible or as directed by the Department after the emergency has abated.

Other General Provisions for Owner/Operators and Contractors:

At flood-impacted sites, facilities will be allowed to salvage useable fuel in USTs by checking fuel for water and allow salvage of useable fuel. If flood water covered vent lines, displacement of fuel would have occurred and large volumes of water may exist in the affected USTs and require proper storage/disposal. This water should not be discharged to areas such as streets, storm drains, sumps and ditches that are not permitted to receive these liquids.

Requirements for remediation of contaminated groundwater via approved corrective action plans in place prior to the Hurricane are suspended at UST sites in the parishes of Jefferson, Orleans, Plaquemines and St. Bernard unless otherwise directed by the Department. However, the Department may require systems remediating free phased product to continue pumping operations.

Sites which have not experienced impacts from the Hurricane shall continue with routine remedial efforts and reporting (Unless RAC/consulting firm handling the remediation has been affected and displaced by the storm).

All facilities in which remedial efforts are temporarily suspended or delayed must provide notice to the Department UST hotline (225) 219-3406 and provide written documentation as directed.

## **EVALUATION SCHEDULE**

The evaluation of UST status should be initiated as soon as conditions allow flood area re-entry. Further testing will be performed once emergency conditions and major restoration efforts are complete and when sufficient contractors are available to perform the work. This further testing should be performed no later than six (6) months after product was first placed into the tank after flooding.

## APPENDIX F

### GUIDANCE FOR SPECIAL WASTE HANDLING, REUSE AND RECYCLING

The following information is intended to assist operators of solid waste facilities, recycling centers, scrap metal dealer, local governments, and contractors in handling debris from the Emergency Areas. The FEMA Debris Plan should be consulted for greater detail.

#### **1. Intent**

Every effort should be made to minimize debris disposed in landfills. Diversion, composting and recycling debris are priorities. Debris handlers should make every effort to properly handle and recover debris materials that have reuse value, are recyclable or the release of which into the environment would be detrimental or is prohibited, e.g. used motor oil.

#### **2. Scope**

Sources of debris requiring special handling include: households, businesses, schools, public buildings, automobiles and boats.

#### **3. Types of materials by source**

The types of debris to which this guidance is directed and the sources from which the subject debris emanates are as follows:

- a. From automobiles: gasoline and diesel fuel, refrigerants, lubricating oils, mercury ABS switches, mercury convenience switches, lead acid batteries, brake and transmission fluid, antifreeze and tires. Propane tanks and large appliances in recreational vehicles should be removed.
- b. From boats: gasoline and diesel fuel, refrigerants, lubricating oils, mercury bilge switches, propane tanks, large appliances, lead acid batteries, transmission fluid and electronics, such as, radar sets, radios, GPS units, and depth finders.
- c. From households and businesses: paints and varnishes, solvents, acids, pesticides, cleaning fluids, pool chemicals, used motor oil, propane tanks, mercury thermostats, liquid mercury, mercury-containing devices, and refrigerants. Large appliances also known as "white goods" may not be landfilled. Refrigerants must be removed. Food should not be left in appliances. Every reasonable effort should be made to recover large electronic devices, such as, television sets, computers and computer monitors.
- d. From schools and public buildings: paints and varnishes, solvents, acids, pesticides, cleaning fluids, pool chemicals, used motor oil, propane tanks, mercury thermostats, liquid mercury, mercury-containing devices, and

refrigerants. Large appliances also known as “white goods” may not be landfilled. Refrigerants must be removed. Food should not be left in appliances. Every reasonable effort should be made to recover large electronic devices, such as, television sets, computers and computer monitors. Special attention should be given to school chemistry laboratories.

### **3. Monitoring**

Demolition teams, debris collectors, local governments and landfill operators should be vigilant for proper handling the above listed items.

### **4. Recordkeeping**

Processors should keep a record of the amount of materials recovered and transported for recycling. Some products already require recordkeeping, e.g. used oil, and duplicate recordkeeping is not required.



## APPENDIX G

### **PUBLIC NOTICE AND PUBLIC PARTICIPATION PROCEDURES REGARDING PROPOSED PERMIT ACTIONS IN HURRICANE IMPACTED AREAS**

The dislocation of residents and the damage to infrastructure in the Emergency Areas has affected the ability of the Department of Environmental Quality to solicit and receive comments on proposed permit actions. The following procedures are intended to address these issues in a manner that offers the opportunity for meaningful public participation and that meets the requirements and intent of the state and federal permitting statutes and regulations.

Public notice and comment procedures will vary according to the categorization of the parish in which the facility at issue is located. The Department will categorize parishes after evaluating all relevant factors, including but not limited to:

- newspaper circulation rates (both paid subscriptions and free distribution), comparing pre-hurricane with current rates
- basic services - power, potable water, and sewage treatment
- local government approval for residents to return for long-term habitation
- number of schools that are open
- availability of locations to serve as document repositories and in which to conduct public hearings should they be requested
- condition of roads

**Category 1 parishes** are those with newspaper circulation rates of at least 90% pre-hurricane levels. Basic services are restored to at least 90% pre-hurricane levels. The parish is open for long-term habitation and public schools have resumed operation. As of this date, the parishes in this category are **Acadia, Allen, Ascension, Beauregard, East Baton Rouge, East Feliciana, Evangeline, Iberia, Iberville, Jefferson Davis, Lafayette, Lafourche, Livingston, Pointe Coupee, St. Charles, St. James, St. John, St. Landry, St. Martin, Tangipahoa, Vermilion, and Washington.**

In Category 1 parishes, the Department will continue to implement the public notice procedures in place before the hurricanes. This includes publication in the required newspapers, sending notice to individuals on the Department's permits mailing list, placing notice on the Department's web page, and sending electronic notice to individuals who have registered with the Department to receive notices in this manner. The DEQ Public Participation Group (PPG) will use its knowledge of newspaper distribution rates and patterns to determine if the notice should be placed in more than one local newspaper. Some permit procedures require notice to also be placed in the official state journal, *The Advocate*.

**Category 2 parishes** are those with newspaper circulation rates of at least 50% pre-hurricane levels, and basic services restored to at least 50% of the parish. The

parish is open for long-term habitation and public schools have resumed operation. As of this date, the parishes in this category are **St. Tammany, Jefferson, Terrebonne, Calcasieu, and Plaquemines.**

In Category 2 parishes, the Department will follow the same procedures provided herein for Category 1, with the addition of the following: Notices will be placed in *The Advocate* to identify the permits placed on public notice for the previous week, sorted by parish. These notices will clearly identify the electronic web link to view the public notices and will give the phone number to call to request additional information or to find out where documents may be reviewed locally.

**Category 3 parishes** are the most severely affected parishes. Any parish not meeting all of the criteria for Category 2 are considered Category 3. As of this date, the parishes in this category are **Cameron, Orleans, and St. Bernard.**

In Category 3 parishes, the Department will follow the same procedures provided herein for Category 2, with the addition of the following:

1. Comment periods will be extended a total of fifteen (15) extra days.
2. Notices will be published twice in the selected newspaper(s).
3. An additional newspaper will be selected in which to publish the notices. This will be the newspaper with the largest circulation in a parish that physically adjoins the parish in which the facility is located.
4. If not already required to do so, the Department will publish notices in *The Advocate*, the official state journal.

When arranging public hearings to solicit comments regarding permitting activities, the Department will work with stakeholders to find suitable hearing site locations.

## APPENDIX H

### Effluent Limitations and Monitoring Requirements for Discharges of Landfill Wastewater From a Construction/Demolition Debris and Woodwaste Landfill

Effluent Characteristics	Discharge Limitations		Monitoring Requirements	
	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow – MGD	Report	Report	1/month	Estimate
TSS	27 mg/l	88 mg/l	1/month	Grab
BOD <sub>5</sub>	37 mg/l	140 mg/L	1/month	Grab
Ammonia	4.9 mg/l	10 mg/l	1/month	Grab
Alpha Terpineol	0.016 mg/l	0.033 mg/l	1/month	Grab
Benzoic Acid	0.071 mg/l	0.12 mg/l	1/month	Grab
p-Cresol	0.014 mg/l	0.025 mg/l	1/month	Grab
Phenol	0.015 mg/l	0.026 mg/l	1/month	Grab
Zinc (Total)	0.11 mg/l	0.20 mg/l	1/month	Grab
pH – Allowable Range (Standard Units)	6.0 (Minimum)	9.0 (Maximum)	1/month	Grab

### Effluent Limitations and Monitoring Requirements for Non-Contaminated Storm Water Discharges of Landfill Wastewater From a Construction/Demolition Debris and Woodwaste Landfill

Effluent Characteristics	Discharge Limitations		Monitoring Requirements	
	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow – MGD	Report	Report	1/month	Estimate
TOC	-----	50 mg/L	1/year	Grab
Oil & Grease	-----	15 mg/L	1/year	Grab
TSS	-----	100 mg/l	1/quarter	Grab
Iron, Total Recoverable	-----	1.0 mg/l	1/quarter	Grab

APPENDIX I



REQUEST FOR DISCHARGE AUTHORIZATION FROM A POND/IMPOUNDMENT/PIT TO BE USED FOR DISPOSAL OF DEBRIS

1. Legal Name of Applicant \_\_\_\_\_

Facility Name \_\_\_\_\_

Mailing \_\_\_\_\_

Zip Code: \_\_\_\_\_

If applicant named above is not also the owner, state owner name, phone # and address.

2. Location of facility. Please provide a specific address, street, road, highway, interstate, and/or River Mile/Bank location.

City \_\_\_\_\_ Zip Code: \_\_\_\_\_ Parish \_\_\_\_\_

3. Provide the following information for the responsible official (LAC 33:IX.2503)

Name \_\_\_\_\_ Title \_\_\_\_\_

Mailing Address \_\_\_\_\_

Phone \_\_\_\_\_

4. Why was the pond/impoundment/pit originally created, what was its original use? List any activities the pond/impoundment/pit has been utilized for since termination of the original use.

5. List any materials that have been disposed of in the pond/impoundment/pit.

6. Indicate how the discharge will reach waters of the state. (ex: unnamed ditch, to South Slough, to the Ponchatoula River)

7. Provide and estimated quantity of the discharge. (in gallons)

Note: Any waters ponds/impoundments/pits that have already been utilized for disposal of debris or other materials and wastes are not eligible for authorization. Please contact the Office of Environmental Services at (225)219-3181 to determine necessary permit coverage.

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations."

Signature of Responsible Official \_\_\_\_\_

Title of Responsible Official \_\_\_\_\_

## **APPENDIX J**

### **Asbestos Cleanup Guidance Documents**

- J1 LDEQ Requirements for "Enhanced" C & D Landfills
- J2 Enhanced C & D Landfill Air Monitoring Report
- J3 "No Action Assurance" Letter, Nakayama to McDaniel, February 3, 2006
- J4 "No Action Assurance" Letter, Nakayama to McDaniel, February 24, 2006
- J5 LDEQ Protocol to Comply with the LESHAP Regulations
- J6 Letter, Blevins to Leggett, March 1, 2006
- J7 LDEQ Inspection Protocol for "Thorough Inspections"
- J8 Louisiana Hurricane NESHAP Matrix

## APPENDIX J1

### LDEQ REQUIREMENTS FOR "ENHANCED" C & D LANDFILLS March 10, 2006

The site must give prior notice to the LDEQ in advance of initiation of implementation of enhanced C&D activities. Each owner or operator of an enhanced construction and demolition debris (C&D) landfill that receives asbestos-containing waste material (ACWM) shall meet the following requirements:

1. Adequate Perimeter Air Monitoring shall be conducted for the presence of asbestos fibers to evaluate and ensure the effectiveness of engineering and operational controls designed to prevent off-site migration of asbestos fibers. Receptors will primarily be workers at the site and drivers delivering waste material, therefore OSHA protection standards should be considered. See **Appendix J2** for an example of a perimeter monitoring plan.

#### a. Sample Methods

- i. Perimeter monitoring shall be conducted in accordance with NIOSH method 7400. Calibrate an SKC or equivalent sampling pump and collect approximately 1 liter per minute (L/min) of air into the filter. This method uses PCM, which is not specific for asbestos.
- ii. NIOSH method 7402 uses TEM to confirm presence or absence of asbestos fibers.
- iii. All samples must be analyzed at a Louisiana Environmental Laboratory Accreditation Program (LELAP) accredited laboratory to perform the sample method.
- iv. Sample turn-around time should be no greater than 48 hours.
- v. All samples and sample results are subject to these requirements

#### b. Detection Limits and OSHA limits

- i. The sample method detection limit shall be 0.01 – 0.02 f/cc
- ii. The OSHA permissible exposure limit (PEL) for asbestos fibers is 0.1 f/cc.
- iii. The OSHA excursion or short-term limit is one fiber per cubic centimeter of air (1 f/cc)

#### c. Record Keeping

- ii. Chain of Custody documentation shall be kept to document and verify samples.

- iii. Calibration checks shall also be recorded
- iv. All records required by this section shall be maintained for 2 years
- v. All records required by this section shall be maintained on-site and be made available for inspection purposes or at the request of the Department.

d. Notification and Response Actions

- i. The operator of an enhanced C&D landfill shall notify LDEQ's Single point of Contact (SPOC) at 225-219-3640 immediately (within 1 hour) upon receipt of sample results indicating the presence of asbestos fibers above the OSHA PEL of 0.1 f/cc.
- ii. Operations at the enhanced C&D landfill shall immediately cease upon receipt of sample results indicating the presence of asbestos fibers above the OSHA PEL of 0.01 f/cc. The operator of the enhanced C&D landfill shall investigate site operations to determine the source of the asbestos fibers.
- iii. Results of the investigation shall be reported in writing to SPOC within 24 hours of completion of the investigation.
- iv. The operator of the enhanced C&D landfill will determine and implement appropriate corrective action. If necessary, these corrective actions must be approved by the Department prior to implementation.
- v. Once the corrective action has been approved by the Department, the enhanced C&D landfill may begin site operations. However frequency of sampling shall return to daily. Procedures in Section 1.b above must be followed to return to a weekly sampling frequency.

e. Reporting

- i. Results of all monitoring and sampling results must be reported to the Department
- ii. During the first quarter (3 month period) of operation, monitoring and sampling results must be reported monthly
- iii. After the first quarter of operation, monitoring and sampling results must be reported semi-annually (every six months)
- iv. Use the DEQ approved air monitoring report form. The forms shall be submitted to the Office of Environmental Services, Air Permits Division, ATTN: Jodi Miller.

2. ACWM shall be placed in a dedicated area separate from C&D waste areas

3. No Visible Emissions allowed *or* Daily Cover must be applied.
  - a. There must be no visible emissions to the outside air from any active waste disposal site where ACWM has been deposited; *or*
  - b. Rather than meet the no visible emission requirement at the end of each operating day, or at least once every 24-hour period while the site is in continuous operation, the ACWM that has been deposited at the site during the operating day or previous 24-hour period shall:
    - i. Be covered with at least 15 centimeters (6 inches) of compacted nonasbestos-containing material, *or*
    - ii. Be covered with a resinous or petroleum-based dust suppression agent that effectively binds dust and controls wind erosion. Such an agent shall be used in the manner and frequency recommended for the particular dust by the dust suppression agent manufacturer to achieve and maintain dust control. Other equally effective dust suppression agents may be used upon prior approval by the Department. Used, spent, or other waste oil is not considered a dust suppression agent; *or*
    - iii. Use an alternative emissions control method that has received prior written approval by the EPA Administrator by demonstrating that the following criteria are met:
      - 1) The alternative method will control asbestos emissions equivalent to currently required methods.
      - 2) The suitability of the alternative method for the intended application.
      - 3) The alternative method will not violate other regulations.
      - 4) The alternative method will not result in increased water pollution, land pollution, or occupational hazards.
4. Unless a natural barrier adequately deters access by the general public, either warning signs and fencing must be installed and maintained as follows, or the requirements of paragraph (3)(b) of this section must be met.
  - a. Warning signs must be displayed at all entrances and at intervals of 100 m (330 ft) or less along the property line of the site or along the perimeter of the sections of the site where ACWM is deposited. The warning signs must:
    - i. Be posted in such a manner and location that a person can easily read the legend; and



- ii. Conform to the requirements of 51 cm × 36 cm (20 inch × 14 inch) upright format signs; and
- iii. Display the following legend in the lower panel with letter sizes and styles of a visibility at least equal to those specified below

<b>Legend</b>	<b>Notation</b>
<i>Disposal Site May Contain Asbestos Containing Waste Material Gothic or Block</i>	<i>2.5 cm (1 inch) Sans Serif,</i>
<i>Do Not Create Dust or Block</i>	<i>1.9 cm (3/4 inch) Sans Serif, Gothic</i>
<i>Breathing Asbestos is Hazardous to Your Health</i>	<i>14 Point Gothic.</i>

- b. The perimeter of the disposal site must be fenced in a manner adequate to deter access by the general public.
  - c. Upon request and supply of appropriate information, the Department will determine whether a fence or a natural barrier adequately deters access by the general public.
5. For all ACWM received, the owner or operator of the active waste disposal site shall:
- a. Maintain waste shipment records, using the LDEQ ADVF form.
  - b. As soon as possible and no longer than 30 days after receipt of the waste, send a copy of the signed waste shipment record to the waste generator and the Office of Environmental Services, Air Permits Division.
  - c. Upon discovering a discrepancy between the quantity of waste designated on the waste shipment records and the quantity actually received, attempt to reconcile the discrepancy with the waste generator. If the discrepancy is not resolved within 15 days after receiving the waste, immediately report in writing to LDEQ, Office of Environmental Services, Air Permits Division and the appropriate LDEQ Regional office. Describe the discrepancy and attempts to reconcile it, and submit a copy of the waste shipment record along with the report.
  - d. Retain a copy of all records and reports required by this paragraph for at least 2 years.
6. Maintain, until closure, records of the location, depth and area, and quantity in cubic meters (cubic yards) of ACWM within the disposal site on a map or diagram of the disposal area.
7. Upon closure, comply with all the provisions of LAC 33:III.5151.N.

8. Submit to the Department, upon closure of the facility, a copy of records of asbestos waste disposal locations and quantities.
9. Furnish upon request, and make available during normal business hours for inspection by the Department, all records required under this section.
10. Notify the Department in writing at least 45 days prior to excavating or otherwise disturbing any ACWM that has been deposited at a waste disposal site and is covered. If the excavation will begin on a date other than the one contained in the original notice, notice of the new start date must be provided to the Department at least 10 working days before excavation begins and in no event shall excavation begin earlier than the date specified in the original notification. Include the following information in the notice:
  - a. Scheduled starting and completion dates.
  - b. Reason for disturbing the waste.
  - c. Procedures to be used to control emissions during the excavation, storage, transport, and ultimate disposal of the excavated ACWM. If deemed necessary, the Department may require changes in the emission control procedures to be used.
  - d. Location of any temporary storage site and the final disposal site.

## APPENDIX J2

### Enhanced C & D Landfill Air Monitoring Report

#### SAMPLE PERIMETER MONITORING PLAN

##### A. Perimeter Sampling

1. Sampling location determined daily
2. Consider wind direction and speed using weather forecasts and on-site wind indicator
3. Sample 2 downwind and 2 upwind locations
4. The set-back from public access areas should be 100 feet

##### B. Frequency of Sampling during Disposal of ACWM

1. First Week – sample daily
2. 2<sup>nd</sup> Week – daily if all available results of first week samples are below acceptable levels
3. If results of 2<sup>nd</sup> week samples confirm results of first week, sampling goes to 1/week.

##### C. Detection Limit and Action Levels

1. The sample method detection limit shall be 0.01 – 0.02 f/cc
2. The OSHA permissible exposure limit (PEL) for asbestos fibers is 0.1 f/cc.
3. The OSHA excursion or short-term limit is one fiber per cubic centimeter of air (1 f/cc)
4. If phase contrast microscopy (PCM), results exceed ½ of the OSHA PEL (or 0.05 f/cc), transmission electron microscopy (TEM) analyses must be performed.

##### D. Sample Methods

1. Perimeter monitoring shall be conducted in accordance with NIOSH method 7400. Calibrate an SKC or equivalent sampling pump and collect approximately 1 liter per minute (L/min) of air into the filter. This method uses PCM, which is not specific for asbestos.

2. NIOSH method 7402 uses TEM to confirm presence or absence of asbestos fibers.
3. All samples must be analyzed at a Louisiana Environmental Laboratory Accreditation Program (LELAP) accredited laboratory to perform the sample method.
4. Sample turn-around time should be no greater than 48 hours.
5. Samples may be taken more frequently than required, but all samples and sample results are subject to these requirements

#### E. Record Keeping

1. Meteorological data (wind speed and direction) shall be recorded daily whenever disposal activities occur.
2. Chain of Custody documentation shall be kept to document and verify samples.
3. Calibration checks shall also be recorded
4. All records required by this section shall be maintained for 2 years
5. All records required by this section shall be maintained on-site and be made available for inspection purposes or at the request of the Department.

#### F. Notification and Response Actions

1. The operator of an enhanced C&D landfill shall notify LDEQ's Single point of Contact (SPOC) at 225-219-3640 immediately (within 1 hour) upon receipt of sample results indicating the presence of asbestos fibers above the OSHA PEL of 0.1 f/cc.
2. Operations at the enhanced C&D landfill shall immediately cease upon receipt of sample results indicating the presence of asbestos fibers above the OSHA PEL of 0.1 f/cc. The operator of the enhanced C&D landfill shall investigate site operations to determine the source of the asbestos fibers.
3. Results of the investigation shall be reported in writing to SPOC within 24 hours of completion of the investigation.
4. The operator of the enhanced C&D landfill will determine and implement appropriate corrective action. If necessary, these corrective actions must be approved by the Department prior to implementation.
5. Once the corrective action has been approved by the Department, the enhanced C&D landfill may begin site operations. However frequency

of sampling shall return to daily. Procedures in Section 1.b above must be followed to return to a weekly sampling frequency.

#### G. Reporting

1. Results of all monitoring and sampling results must be reported to the Department
2. During the first quarter (3 month period) of operation, monitoring and sampling results must be reported monthly
3. After the first quarter of operation, monitoring and sampling results must be reported semi-annually (every six months)
4. Use the DEQ approved air monitoring report form. The forms shall be submitted to the Office of Environmental Services, Air Permits Division, ATTN: Jodi Miller.

## APPENDIX J3

### “No Action Assurance” Letter, Nakayama to McDaniel, February 3, 2006



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

FEB 3 2006

OFFICE OF  
ENFORCEMENT AND  
COMPLIANCE ASSURANCE

Mike D. McDaniel, Ph.D.  
Secretary  
Louisiana Department of Environmental Quality  
P. O. Box 4301  
Baton Rouge, Louisiana 70821-4301

Dear Dr. McDaniel:

This letter is in response to a January 24, 2006 electronic mail message from Cheryl Nolan of your staff transmitting a draft Protocol from the Louisiana Department of Environmental Quality (LDEQ) developed to provide guidance on compliance with applicable asbestos standards during the demolition of houses and disposal of resulting debris in response to Hurricane Katrina and Hurricane Rita. Staff from EPA Headquarters and EPA Region 6 have had a number of conversations with LDEQ staff in the past week, and EPA understands that LDEQ wishes to explore potential flexibility to facilitate the parts of the Protocol that contemplate 1) the grinding of debris containing potentially regulated asbestos containing material to reduce its volume and 2) treating certain homes (e.g., those built after 1980) as not containing regulated asbestos. The purpose of this letter is to explain how EPA would like to proceed to resolve these issues and to provide some interim flexibility with respect to federal National Emissions Standards for Hazardous Air Pollutants (NESHAP) requirements that will allow additional demolition to go forward as we continue to work on these issues.

During recent phone calls with EPA regional and headquarters staff, LDEQ identified several issues that are adversely affecting the speed of demolition and debris disposal and which it seeks to address in its Protocol. These issues include limited landfill space that can accept asbestos contaminated material, the sheer volume of debris which must be transported and placed in the landfills, and the number of houses that must be demolished and which are subject to the Clean Air Act NESHAP asbestos inspection requirements and/or the emission control and disposal requirements.

EPA recognizes the tremendous challenge to demolish homes severely damaged by the hurricanes and dispose of the huge amounts of debris as expeditiously as possible. On my recent visit to the New Orleans area, which members of LDEQ staff and management graciously hosted, I saw the actual level of Hurricane Katrina's devastation, and it brought home the need to work closely with Louisiana to explore options that will provide a reasonable path forward on demolition and disposal activities that will also be protective of the public and the environment. EPA appreciates that LDEQ has already agreed in the past week to several modifications to the approach laid out in the draft Protocol to address the Agency's concerns regarding the consistency of the Protocol with federal and state requirements. EPA is committed to continuing to work closely with LDEQ to try to resolve the "grinding" issue expeditiously and discuss the "post-1980" and other debris management issues soon after that.

As EPA staff has discussed with LDEQ staff over the past week, EPA needs to receive and evaluate additional information to make decisions as to whether to grant a No Action Assurance for these

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options. LDEQ has agreed to provide additional information on landfill capacity and data on grinding activities, e.g., air monitoring data from sites where grinding debris from completely destroyed areas (on the ground debris) has taken place. EPA applauds the efforts that LDEQ and the U.S. Army Corps of Engineers have made to develop such data and will expedite its review and evaluation of the data, in consultation with LDEQ, once the Agency receives the information.

As EPA and LDEQ work to address grinding and other issues, we understand from Region 6 that LDEQ has requested flexibility to expedite the demolition of certain structures. The first part of LDEQ's request is to allow certain residences subject to a government demolition order to be treated as though they have been determined to be structurally unsound and in danger of imminent collapse. The asbestos NESHAP exempts structures being demolished under a government demolition order, issued because the structure is unsound and in danger of imminent collapse, from the 10 day notification requirement and from the requirement to inspect and remove asbestos provided specific emission control procedures (e.g., trained supervisor, asbestos NESHAP demolition work practices) are followed. See 40 CFR § 61.145(a)(3). The NESHAP transport and disposal requirements also apply to the debris from these demolitions.

In light of the widespread destruction from the hurricanes, EPA understands that demolition orders may be issued for a variety of reasons. Such circumstances include houses found to be structurally unsound and in danger of imminent collapse, houses found to be structurally unsound, houses moved off their foundations (but which may not have been inspected by a structural engineer), houses found to be uninhabitable (but structurally sound), or houses facing repair costs higher than the structure's replacement cost. Such decisions are and remain the responsibility of state or local governments.

Given the unprecedented situation faced by the State, EPA is granting a No Action Assurance for the asbestos NESHAP, 40 CFR Part 61, Subpart M, to allow residences that are subject to a government issued demolition order based on the residence being 1) structurally unsound but not necessarily in danger of imminent collapse, or 2) moved off of its foundation, to be treated as though the demolition order is based on a determination that the house is structurally unsound and in danger of imminent collapse. This No Action Assurance will allow such houses to be demolished without inspection and removal of asbestos prior to demolition but will ensure adequate protections through the requirements of the asbestos NESHAP. These requirements include notification, handling, transportation and disposal procedures (e.g., thorough wetting of the material from before the demolition process through disposal). Although not a requirement, EPA recommends thoroughly wetting the interior to the extent possible through window or door openings and/or through openings made into the attic spaces from the exterior prior to the demolition. This No Action Assurance does not apply to structurally sound residences that are being demolished due to the house being uninhabitable or due to the cost of repair being greater than the replacement cost.

The second part of LDEQ's request seeks flexibility regarding government issued demolition orders which are based on broad determinations for groups of houses. EPA agrees that, given the severe and widespread devastation, it may not be practical for state or local officials to make an individual determination for every residential structure regarding whether the house is structurally unsound and in danger of imminent collapse. LDEQ staff have stated that significant delays would result from a requirement to conduct individual structural assessments for every affected residence. In light of these valid concerns and the need to proceed with the recovery effort in a timely manner, EPA is granting LDEQ a No Action Assurance for the asbestos NESHAP to treat a government issued demolition order based on a determination made by the state or local government for groups of residences, e.g., a block, a subdivision,

or other appropriate geographic area, the same as an order based on an individual determination for each of the residences in the group.

These No Action Assurances will be in effect for twelve months from the date of this letter and apply only to the demolition of those houses in Louisiana that were damaged by Hurricane Katrina or Hurricane Rita and which are subject to a government issued demolition order. Consistent with the NESHAP, the No Action Assurances apply only to residences that have four or fewer units. The No Action Assurances apply to LDEQ and persons operating at LDEQ's direction, and the U.S. Army Corps of Engineers and persons operating at the Corps' direction. EPA reserves the right to revoke or modify these No Action Assurances if the Agency believes that such action is necessary to protect the environment or public health.

EPA recognizes that the State faces extraordinarily difficult circumstances in cleaning up the huge quantity of debris generated by Hurricanes Katrina and Rita. EPA will continue to work with LDEQ to address the "grinding" and "post-1980" issues and to identify and address other instances where regulatory flexibility may be appropriate. If you have any questions, please call me at 202-564-2440, or have your staff call Randy Hill of my staff at 202-564-2220 or John Blevins of EPA Region 6 at 214-665-2210.

Sincerely,



Granta Y. Nakayama  
Assistant Administrator

cc: J. I. Palmer, Jr., Regional Administrator, Region 6  
Richard Greene, Regional Administrator, Region 4  
Hal Leggett, LDEQ  
Chuck Carr Brown, LDEQ  
Cheryl Nolan, LDEQ  
BG Robert Crear, U.S. Army Corps of Engineers  
Charles Chisolm, Executive Director, MDEQ



## APPENDIX J4

### "No Action Assurance" Letter, Nakayama to McDaniel, February 24, 2006



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

FEB 24 2006

OFFICE OF  
ENFORCEMENT AND  
COMPLIANCE ASSURANCE

Mike D. McDaniel, Ph.D.  
Secretary  
Louisiana Department of Environmental Quality  
P.O. Box 4301  
Baton Rouge, Louisiana 70821-4301

Dear Dr. McDaniel:

EPA and Louisiana Department of Environmental Quality (LDEQ) staff have continued to work together to discuss areas where LDEQ may need additional flexibility to address the challenges caused by Hurricanes Katrina and Rita. In a meeting between our respective staffs on February 16 and 17, 2006, LDEQ was clear that the issues of the number of houses requiring demolition, the sheer volume of debris, limited landfill space that can currently accept asbestos contaminated material, and the need to move expeditiously to proceed with demolition activities are still critical factors that need to be addressed. As a result, LDEQ requested at that meeting additional flexibility to facilitate demolition activities. In light of the circumstances outlined by LDEQ, today EPA is exercising its enforcement discretion and granting a No Action Assurance.

As you know, on February 3, 2006, EPA issued a No Action Assurance for the asbestos National Emissions Standards for Hazardous Air Pollutants (NESHAP), 40 CFR Part 61, Subpart M, to allow residences that are subject to a government issued demolition order based on the residence being 1) structurally unsound but not necessarily in danger of imminent collapse, or 2) moved off of its foundation, to be treated as though the demolition order is based on a determination that the house is structurally unsound and in danger of imminent collapse. Under section 61.145(a)(3) of the asbestos NESHAP regulation, buildings subject to a government issued demolition order based on a determination that the building is structurally unsound and in danger of imminent collapse are not subject to otherwise applicable requirements for inspection and removal of asbestos prior to demolition. Such structures must nonetheless be demolished, transported and disposed of in accordance with specified requirements that ensure adequate protection from any asbestos the buildings may contain. These requirements include notification, thorough wetting of the building both prior to and during the demolition process, and proper disposal of all the debris as if it contained asbestos. The effect of the February 3 No Action Assurance is to allow residences subject to government issued demolition orders based on the structures being unsound or moved off their foundations to be demolished and disposed of in accordance with the streamlined requirements of section 61.145(a)(3).

Today, EPA is extending the February 3, 2006 No Action Assurance to residences that are subject to government issued demolition orders because they are uninhabitable for other environmental reasons (e.g., from excessive flood damage rendering the home uninhabitable). Under this No Action Assurance, as under the February 3 action, such residences may be treated as though they are subject to government issued demolition orders based on a determination that they are structurally unsound and in danger of imminent collapse and thus subject to section 61.145(a)(3) of the asbestos NESHAP regulation. In other words, LDEQ, the U.S. Army Corps of Engineers, local governments, or persons acting under direction of any of these governmental entities, may apply to such residences the NESHAP requirements governing buildings that are "structurally unsound and in danger of imminent collapse." As noted above, for such buildings the asbestos NESHAP dispenses with prior inspection and removal of asbestos but requires notification and proper handling, transport and disposal. EPA is taking this action because it recognizes the necessity of addressing a number of residences not covered by the earlier No Action Assurance, but in need of expeditious demolition and removal.

Today's No Action Assurance will be in effect until February 3, 2007, and apply only to demolition of those residences in Louisiana that were damaged by Hurricane Katrina or Rita and which are subject to a government issued demolition order. In addition, this No Action Assurance applies only to residences that have four or fewer units being demolished in areas where public access is restricted. The No Action Assurance applies to LDEQ and persons operating at LDEQ's direction, the U.S. Army Corps of Engineers and persons operating at the Corps' direction, and local governments and persons acting under their direction. Today's action does not apply to structures that are being demolished solely because the cost of repair exceeds the cost of replacement. This No Action Assurance does not apply to any other federal requirements that may apply to residential demolition and disposal activities (other than the asbestos NESHAP provisions specifically discussed herein). EPA reserves the right to revoke or modify this No Action Assurance if the Agency believes that such action is necessary to protect public health or the environment.

The February 3, 2006 No Action Assurance did not apply to local governments or persons operating at their direction. Today, EPA is amending that No Action Assurance to include local governments and persons operating at their direction because the Agency understands the local governments have been handling a significant portion of the demolition activities directly and they require the same flexibility to proceed expeditiously.

In accordance with section 61.145(a)(3), debris resulting from the demolition of any residence deemed and treated as "structurally unsound and in danger of imminent collapse" under either the February 3, 2006 No Action Assurance or today's No Action Assurance must be handled and disposed of as if it potentially contained asbestos. We understand that LDEQ intends to enhance a number of its existing construction and demolition (C&D) landfills with additional controls to meet or exceed the federal standards under the NESHAP for disposal of these types of waste material that potentially contain asbestos. Because certain types of asbestos (but not all types of asbestos) were banned after 1980, LDEQ intends to send debris from "unsound"

residences built after 1980 to these enhanced landfills. However, since the enhanced C&D landfills, as well as Louisiana's permitted Type I and Type II landfills are required by Louisiana to either meet or exceed federal disposal standards under the NESHAP, EPA will defer to the State to set disposal location priorities.

EPA is committed to continue to work with LDEQ in addressing the very difficult circumstances caused by Hurricanes Katrina and Rita. For example, our staffs are revisiting the use of Air Curtain Destructors and grinders as means of debris volume reduction to further assist in addressing the lack of adequate landfill space. I am hopeful these activities will be able to move forward, perhaps providing relief in both the immediate situation and future times of need. If you have any questions, please give me a call at 202-564-2440, or have your staff call Randy Hill of my staff at 202-564-2220 or John Blevins of EPA Region 6 at 214-665-2210.

Sincerely,



Granta Y. Nakayama  
Assistant Administrator

cc: Richard Greene, Regional Administrator, Region 6  
J.I. Palmer, Jr., Regional Administrator, Region 4  
Dr. Harold Leggett, LDEQ  
Dr. Chuck Carr Brown, LDEQ  
Cheryl Nolan, LDEQ  
BG Robert Crear, U.S. Army Corps of Engineers  
Charles Chisolm, Executive Director, MDEQ

## Appendix J5

### LDEQ Protocol to Comply with the LESHAP Regulations 03/16/2006

#### Background

On August 29, 2005, Hurricane Katrina struck southeast Louisiana as a strong Category 4 Hurricane, on a north heading at 15 mph, with maximum sustained winds of approximately 143 mph with gusts up to 165 mph<sup>1</sup>. The storm brought with it a storm surge of 20-30 feet. Although Katrina weakened before landfall, the Category 4 hurricane's fierce winds and near-record storm surge were still able to cause widespread destruction and loss of life.<sup>2</sup> In Southeast Louisiana, the Parishes of Orleans, St. Bernard and Plaquemines were flooded by the excessive rain and a storm surge of 20-30 ft, overtopping levees, and ultimately causing the breach of certain levees that separate New Orleans from surrounding lakes.<sup>3</sup> Along the shore of Lake Pontchartrain, severe storm surge damage was experienced along the lake shore from Mandeville to Slidell with storm surge water moving north into Slidell, up to 6 ft deep in some locations.<sup>4</sup> At least 80% of New Orleans was under flood water on August 31st, largely as a result of levee failures from Lake Pontchartrain. The combination of strong winds, heavy rainfall and storm surge led to breaks in the earthen levees after the storm passed, leaving some parts of New Orleans under 20 feet of water.<sup>5</sup>

Subsequent flooding occurred in Orleans, Plaquemines, and St. Bernard parishes as a result of rain and storm surges as Hurricane Rita moved through the Gulf of Mexico to strike southwest Louisiana and southeast Texas on September 24, 2005.<sup>6</sup>

Based on the US Census data from 2000, there are a total of 440,269 homes in Orleans, Jefferson, St. Bernard and Plaquemines Parishes. Of these homes, an estimated 360,398 were constructed prior to 1980.<sup>7</sup>

The purpose of this protocol is to provide guidance for compliance with the standards for the demolition and renovation activity pursuant to the Louisiana Emission Standard for Hazardous Air Pollutants (LESHAP) for asbestos (LAC 33:III.Chapter 51.Subchapter M). Subchapter M has been deemed to be at least as stringent as the federal regulation and the Louisiana Department of Environmental Quality has received delegation of the NESHAP program from the US EPA. The LDEQ has used EPA guidance to provide this assistance in the determination of compliance with Chapter 51

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<sup>1</sup> See <http://www.srh.noaa.gov/hgx/gifs/Katrina.jpg>.

<sup>2</sup> See [http://www.srh.noaa.gov/lix/Katrina\\_overview.html](http://www.srh.noaa.gov/lix/Katrina_overview.html)

<sup>3</sup> See [http://www.srh.noaa.gov/lix/html/psh\\_katrina.htm](http://www.srh.noaa.gov/lix/html/psh_katrina.htm)

<sup>4</sup> See [http://www.srh.noaa.gov/lix/html/psh\\_katrina.htm](http://www.srh.noaa.gov/lix/html/psh_katrina.htm)

<sup>5</sup> See <http://lwf.ncdc.noaa.gov/oa/climate/research/2005/katrina.html#impacts>

<sup>6</sup> See [http://www.srh.noaa.gov/lix/html/psh\\_rita.htm](http://www.srh.noaa.gov/lix/html/psh_rita.htm)

<sup>7</sup> See date from US Census website, "Profile of Selected Housing Characteristics: 2000" for Geographic Area of Orleans Parish, Jefferson Parish, St. Bernard Parish and Plaquemines Parish and accompanying summary sheet.

(and through delegation, the NESHAP). The LDEQ has also received letters from EPA providing targeted flexibility regarding compliance with certain aspects of the NESHAP. Attached to this protocol is a matrix developed by EPA dated February 24, 2006, that summarizes the LESHAP and NESHAP requirements and the flexibility afforded by EPA.

#### **A. Structures demolished by the Hurricanes and Debris on the ground**

If a house or structure has been effectively demolished by the hurricane, collection, treatment and disposal of the debris is not covered by LAC 33:III.5151.F. Additionally, this debris is not subject to the asbestos LESHAP, in accordance with EPA guidance.<sup>8</sup>

#### **B. General guidelines for demolition and related activities**

1. Best Management Practices – Conduct all asbestos demolition, grinding, transportation, and disposal activities using best management practices and engineering controls to control emissions. These include, but are not limited to wetting structures/materials before, during and after demolition or grinding, controlled collapse of walls, and taking all reasonable steps to avoid running over asbestos containing material with heavy equipment.
2. Site Security – For all demolition, grinding and disposal sites handling asbestos containing material establish and implement procedures to restrict public access.
3. Air Monitoring – Conduct air monitoring for the presence of asbestos fibers at enhanced construction and demolition debris landfills and grinding facilities.

#### **C. Structures that remain standing after the Hurricanes**

1. Demolition/Renovation conducted by homeowner or homeowner's contractor

Renovation or Demolition by the individual homeowner of residential buildings with four or fewer dwelling units is not covered by the asbestos LESHAP<sup>9</sup>. Additionally, the resultant debris is not subject to the asbestos LESHAP.

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<sup>8</sup> Letter dated November 9, 2005, EPA (Coleman) to US Army Corps of Engineers (Smithers), which states: "If a building or other structure was totally destroyed by a hurricane, then the National Emission Standard for Asbestos, 40 C.F.R. Part 61, Subpart M (Asbestos NESHAP) does not apply to any subsequent activities. For such destroyed structures, you may immediately begin removal and proper disposal of the resulting debris."

<sup>9</sup> NESHAP Clarification of Intent, Federal Register, July 28, 1995, Volume 60, Number 145, pages 38725-38726 which states: "EPA believes that individual small residential buildings that are demolished or renovated are not covered by the asbestos NESHAP. This is true whether the demolition or renovation is performed by agents of the owner of the property or whether the demolition or renovation is performed by agents of the municipality. EPA believes that the residential building exemption applies equally to an individual small residential building regardless of whether municipality is the "owner or operator" for the purposes of demolition or renovation."

## 2. Demolition of residential structures conducted as a result of a government order

The EPA has indicated that multiple buildings being demolished as a result of the hurricane in accordance with a government order are considered an "installation" as defined in the asbestos LESHAP<sup>10, 11, 12</sup>. Assuming the demolition of multiple residential buildings with four dwelling units or less by a single entity are covered by the asbestos LESHAP, the department will consider compliance with this protocol as compliance with the asbestos LESHAP. It will be the responsibility of the local government or its contractors to determine the boundaries of the installation site. EPA's guidance with respect to "site" states that the site should be a "relatively compact area", but "the local government should use common sense when applying this guide."<sup>13</sup> EPA also states that "EPA believes that if a demolition project involves the demolition of several contiguous city blocks, the entire area could be considered a site."<sup>14</sup>

Notification of demolition and wetting requirements apply in all instances of demolition using the AAC-2 form. The AAC-2 form may be located on the Department's Asbestos and Lead web page at <http://www.deq.louisiana.gov/portal/Default.aspx?tabid=2251>.

### a. Facilities that are structurally unsound or uninhabitable

It is the responsibility of local governments and their contractors to determine which houses should be demolished because they are unsound or otherwise uninhabitable, and to prepare a list of the houses to be demolished. In No Action Assurance letters dated February 3, 2006, and February 24, 2006, EPA provides for flexibility for houses that are determined to be unsound or otherwise uninhabitable. Local governments and their contractors should be aware of this flexibility when making determinations. The following structures are the subject of EPA's No Action Assurance letters:

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<sup>10</sup> NESHAP Clarification of Intent, Federal Register, July 28, 1995, Volume 60, Number 145, pages 38725-38726 which states: "However, EPA believes that the residential building exemption does not apply where multiple (more than one) small residential buildings on the same site are demolished or renovated by the same owner or operator as part of the same project or where a single residential building is demolished or renovated as part of a larger project that includes demolition or renovation of non-residential buildings." The notice further states: "EPA does not believe the residential building exemption was designed to exempt larger demolitions or renovations on a particular site, even where smaller residential buildings are involved."

<sup>11</sup> EPA has also issued subsequent Applicability Determinations which support this position. See Determination Detail, Control #A960033, dated 11/01/1995 and Control #A970008, dated 09/04/1997.

<sup>12</sup> Letter dated November 9, 2005, EPA (Coleman) to US Army Corps of Engineers (Smithers), which states: "Please note that demolition and disposal of "partially-damaged" or "standing-but-unsafe-to enter" structures are subject to Asbestos NESHAP requirements."

<sup>13</sup> NESHAP Clarification of Intent, Federal Register, July 28, 1995, Volume 60, Number 145, pages 38725-38726.

<sup>14</sup> Ibid.

- Residences that are subject to a government issued demolition order based on the residence being structurally unsound but not necessarily in danger of imminent collapse,
- Residences that are subject to a government issued demolition order because the structure has been moved off of its foundation, and
- Residences that are subject to government issued demolition orders because they are uninhabitable for other environmental reasons (e.g., from excessive flood damage rendering the home uninhabitable).

These residences may be treated as though the demolition order is based on a determination that the house is structurally unsound and in danger of imminent collapse. As a result, these residences may be demolished in accordance with more streamlined demolition requirements

Since no inspections are performed, the entire waste stream must be disposed of in a permitted Type I or II landfill or other LDEQ approved landfill that meets federal NESHAP disposal standards (such as an enhanced C & D landfill which are required to have additional controls to meet or exceed the federal standards under NESHAP (see 40 CFR § 61.154).).

#### **b. Structurally Sound Homes**

For the installations consisting of sound residential structures, the LDEQ requires a thorough inspection of such residential structures by an asbestos inspector accredited by the LDEQ. See attached “LDEQ Inspection Protocol for “thorough inspections,” which is considered compliant with LESHAP.

#### **D. Thorough Asbestos Inspections**

Thorough asbestos inspections must be conducted by asbestos inspectors accredited by LDEQ. The LDEQ Inspection Protocol for “thorough inspections”, which is considered compliant with LESHAP, must be followed when conducting a “thorough inspection” for the purposes of compliance with LESHAP.

#### **E. Disposal of Waste Streams resulting from inspections and demolition activities**

- Debris from residences that are being treated as structurally unsound and in danger of imminent collapse must be disposed of in LDEQ permitted Type I or II landfills authorized to accept asbestos or other LDEQ approved landfill that meets federal NESHAP disposal standards (such as an enhanced C & D landfill).
- Non-friable Category I and II ACM (Non-RACM) may be disposed of at designated areas within permitted Type III landfills that are LDEQ approved for Non-friable Category I and II disposition.

- RACM that has been removed from residences for which a thorough inspection has been conducted must be disposed of in permitted Type I or II landfills authorized to accept asbestos.

- C&D waste may be disposed of at LDEQ approved Construction and Debris waste sites.

## **F. Handling of Debris and Waste Materials from Demolition Activity**

1. For installations where residences are being thoroughly inspected prior to demolition and RACM is identified, or where residences are being treated as structurally unsound and in danger of imminent collapse, appropriate procedures for asbestos emission control provided by LAC 33:III.5151.F.3 shall be employed. The wet method (fogging/misting) should be used prior to demolition, during demolition, and during loading of the material. Mist the houses, including asbestos-containing roofing shingles and siding, remove, segregate, and transport in an appropriate manner to a permitted asbestos Type I or II landfill, enhanced C&D landfill or regular C&D landfill as appropriate. The removal and segregation of material suspected to contain asbestos, including asbestos containing roofing and siding is recommended.
2. Each structure should be knocked down in a controlled manner to minimize excess breakage of asbestos containing material. Debris should be wetted during demolition, interim staging, and loading activities.
3. It may not be necessary that Category I asbestos containing material (vinyl tile, mastic, etc.) be removed and segregated from the construction and debris waste if it does not have a high probability of becoming friable. If this material does not become friable by the forces expected to act on the material in the course of demolition, it may be disposed at a designated area in an approved C&D disposal site. Regarding Category I asbestos containing material, follow the LDEQ Inspection Protocol for "thorough inspections."

### **4. Removal of RACM from Inside Sound Structures**

For structurally sound structures, shut windows and doors. If they cannot be shut, install critical barriers (e.g. polyethylene sheeting). However, sufficient wetting is required to manage emissions during removal.

- a. Negative air is not required;
- b. The wet method must be employed to remove the regulated ACM;
- c. Regulated ACM waste must be bagged and labeled;
- d. Bulk material left behind must be visually inspected and cleaned appropriately;
- e. No air monitoring clearance is necessary;
- f. Walls, ceilings, floors, etc. must be encapsulated to ensure ACM fibers are not being released during demolition and loading;



- g. Follow demolition procedures as noted in this Guidance, and use OSHA worker protection guidelines.

### **Summary**

The Department has determined that compliance with the above procedures is compliant with LESHAP requirements. Entities conducting activities in accordance with this document will be considered in compliance with LESHAP requirements.

APPENDIX J6

Letter, Blevins to Leggett, March 1, 2006



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6  
1445 ROSS AVENUE, SUITE 1200  
DALLAS, TEXAS 75202-2733

March 1, 2006

Harold Leggett, Ph.D.  
Assistant Secretary  
Office of Environmental Compliance  
Louisiana Department of Environmental Quality (LDEQ)  
P.O. Box 4312  
Baton Rouge, LA 70821-4312

Dear Dr. Leggett:

Thank you for the opportunity to review various drafts of the "LDEQ Protocol to Comply with the LESHAP Regulations (LESHAP Protocol)." I appreciate your willingness to incorporate EPA's comments into the latest draft (attachment to 1:35 pm email from Cheryl Nolan on March 1, 2006) of the LESHAP Protocol. EPA has reviewed this version of the Protocol and finds it to be consistent with the Federal National Emission Standards for Hazardous Air Pollutants (NESHAP) for asbestos or allowed under EPA's No Action Assurance letters to LDEQ of February 3, 2006 and February 24, 2006.

I understand that LDEQ is planning to finalize the LESHAP Protocol today for distribution to various Federal, State, and local governmental agencies, as well as contractors, to aid in the demolition of hurricane-impacted residences. EPA supports the finalization and widespread distribution of the LESHAP Protocol.

I also personally appreciate LDEQ's efforts in preparing the LESHAP Protocol and your willingness to work with us on our comments. If EPA can be of further assistance in relation to this effort, please let me know.

Sincerely yours,

A handwritten signature in black ink, appearing to read "John Blevins".

John Blevins  
Director  
Compliance Assurance and  
Enforcement Division

cc: Lee Champagne, FEMA  
Colonel Pearson, USCOE  
Timothy Gouger, USCOE  
Randy Hill, EPA HQ  
Larry Starfield, EPA  
David Gray, EPA  
Sam Coleman, EPA  
David Garcia, EPA

## **APPENDIX J7**

### **LDEQ Inspection Protocol for “Thorough Inspections”**

Regulated Asbestos-Containing Material (RACM) is:

- 1- Friable asbestos material;
- 2- Category I nonfriable ACM that has become friable;
- 3- Category I nonfriable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading, in accordance with 40 CFR Subpart M-National Emission Standard for Asbestos, 61.141. Definitions; and
- 4- Category II nonfriable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations.

Details of a thorough inspection include, at a minimum:

An LDEQ accredited asbestos inspector performs a visual inspection whereby all suspect Asbestos Containing Material (ACM) is identified and sampled or is presumed to be positive for asbestos. Samples shall be analyzed by an LDEQ accredited laboratory, utilizing Polarized Light Microscopy (PLM).

An inspector may make a determination that Category I material such as resilient floor covering, caulking, etc. is in good condition by administering hand pressure. If the material is not friable and in good condition, it is not necessary to sample the material because it is Category 1 in good condition that does not have a high probability of becoming regulated ACM, and is therefore considered to be non-regulated.

The inspector makes an inventory of homogenous areas of suspect materials, whether those materials are Category I, Category II, or friable materials (based on method of renovation or demolition), bulk sample locations, date of sampling, and the name and accreditation number(s) of inspector(s) collecting the samples.

The asbestos sampling protocol shall be in accordance with the Asbestos Hazard Emergency Response Act (AHERA), and includes exterior surfaces.

Category II material such as cement asbestos containing roofing shingles and siding may be assumed ACM.

# Louisiana Hurricane NESHAP Matrix

(residential structures of 4 units or less; no condos, apartments or commercial buildings)

2/24/06

TYPE OF STRUCTURE	ACTIVITY	NESHAP	FLEXIBILITY WITH NAA LTR
<b>UNSOOUND STRUCTURE (structure subject to a governmental demolition order for which a thorough inspection is not possible)</b>	inspection	Thorough inspection not required (due to structure being structurally unsound and in imminent danger of collapse). Structure is subject to a governmental demolition order.	<ol style="list-style-type: none"> <li>1. Unsound structure definition expanded to include homes that are structurally unsound or moved off their foundation but not necessarily in danger of imminent collapse (2/3/06). Good until 2/3/07</li>   <li>2. Government issued demolition orders for groups of covered residences (e.g. a block, subdivision, or other appropriate geographic area) the same as an order based on individual determination (2/3/06). Good until 2/3/07</li>   <li>3. Unsound structures definition expanded to include homes that are uninhabitable for other environmental reasons. (2/24/06)</li> </ol>

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Louisiana Hurricane NESHAP Matrix

APPENDIX J8

Note: This is a general summary of the asbestos NESHAP requirements. The matrix does not include administrative requirements related to compliance with the asbestos NESHAPs (such as notification requirements). In order to determine the precise asbestos NESHAP requirements and EPA's No Action Assurance requirements that might apply in any given situation, please refer to the asbestos NESHAP regulations at 40 CFR Part 61, Subpart M and the specific No Action Assurance letters (Appendices J3 and J4).

			Good Until 2/03/07
pre-demolition	RACM removal not possible due to condition of structure  Note: Exterior RACM may be removed (by certified contractor) if no visible emissions are generated, but <b>all waste</b> (both removed RACM and all other material from the remaining standing structure) must be disposed of in a NESHAP compliant landfill		N/A
demolition	1. Must be wetted throughout demolition process (i.e. prior to and during the demolition process) to eliminate visible emissions. 2. Asbestos trained manager/supervisor must be present		N/A
transportation	Manage waste streams as RACM (wet and covered trucks)		N/A
disposal	1. State asbestos permitted landfill, or 2. NESHAP compliant C&D landfill		1. Disposal of asbestos containing material in "enhanced" (to become NESHAP compliant) C&D landfill cell for post 1980 structures per LDEQ determination. (2/24/06) Good until 2/03/07

Note: This is a general summary of the asbestos NESHAP requirements. The matrix does not include administrative requirements related to compliance with the asbestos NESHAPs (such as notification requirements). In order to determine the precise asbestos NESHAP requirements and EPA's No Action Assurance requirements that might apply in any given situation, please refer to the asbestos NESHAP regulations at 40 CFR Part 61, Subpart M and the specific No Action Assurance letters (Appendices J3 and J4).

<b>SOUND STRUCTURE (structure subject to governmental demolition order that is able to be thoroughly inspected)</b>	inspection	<ol style="list-style-type: none"> <li>1. Certified Inspectors required</li> <li>2. Thorough inspection required of each structure (Attachment 1)</li> <li>3. Structure is subject to a governmental demolition order.</li> </ol>	N/A
	pre-demolition	<p>RACM removal</p> <ol style="list-style-type: none"> <li>1. Certified contractor required</li> <li>2. Adequately wet prior to removal to eliminate visible emissions.</li> <li>3. Handle material in a way to prevent damage.</li> </ol>	N/A
	demolition	Once RACM removed, no additional requirements- only C&D remaining (handle according to State/local requirements)	N/A
	transportation	<ol style="list-style-type: none"> <li>1. RACM waste- place in leak-proof containers, wet, covered truck</li> <li>2. C&amp;D- no requirements (handle according to State/local requirements)</li> </ol>	N/A
	disposal	<ol style="list-style-type: none"> <li>1. RACM waste- State asbestos permitted landfill</li> <li>2. C&amp;D waste- No requirements (handle according to State/local requirements)</li> </ol>	N/A

Note: This is a general summary of the asbestos NESHAP requirements. The matrix does not include administrative requirements related to compliance with the asbestos NESHAPs (such as notification requirements). In order to determine the precise asbestos NESHAP requirements and EPA's No Action Assurance requirements that might apply in any given situation, please refer to the asbestos NESHAP regulations at 40 CFR Part 61, Subpart M and the specific No Action Assurance letters (Appendices J3 and J4).