

## Best Management Practices (BMPs) for Beneficial Use of Discarded Barite & Cement Powder Mixtures

(March 20<sup>th</sup>, 2007)

The following materials are not considered regulated materials by the Louisiana Department of Environmental Quality as long as they are beneficially used in the manner described below for fill, foundations, and roadbed construction.

- Material received for beneficial use shall only be unused, uncontaminated, virgin barite and/or cement powders. It shall not contain chemicals, oils, scale, spent abrasive blasting material, or other regulated solid wastes.
- 2. Receiving stockpile or fill/placement site owner/operator shall request and keep records from generators certifying that material delivered is unused and uncontaminated. Such information shall be made available to the Department upon inspection.
- Receiving stockpile or fill/placement site owner/operator shall only receive material intended for beneficial use and maintain a list of transporters that regularly make deliveries to a receiving stockpile. Such information shall be made available to the Department upon inspection.
- 4. Cement and barite powders intended for beneficial use as fill material shall be thoroughly mixed and sufficiently hydrated to become a stable, hardened, non-flowable solid, or solid aggregate either in a receiving stockpile or at final placement so as to prevent blowing dust (air pollution) or uncontained mud (potential stormwater pollution), or a dispersion (muddy plume, or suspended solids pollution) in open waters of the state. The mixture shall not contain less than 20% cement powder (or 4 to 1 ratio of barite to cement powders) before adding water, as indicated by records of materials delivered by generators to the receiving or fill/placement site owner/operator.
- 5. Receiving stockpile or fill/placement site owner/operator shall keep records (for 5 years) of material delivered from generators or other stockpiles (how much of what, from whom, when) and material removed to final fill/placement elsewhere (how much, where, when, property owner). Such information shall be made available to the Department upon inspection.
- 6. Receiving stockpile or fill/placement site owner/operator shall maintain copies of Material Safety Data Sheets (MSDS) on barite and cement powders and inform employees who work with these materials where MSDS can be read. Upon request, citizens shall be allowed to read the MSDS as well. Owner/Operator shall also provide adequate personal protection equipment (PPE) to employees working with this material.
- 7. Material delivered to a receiving stockpile shall be wetted down to form a crust immediately upon arrival and every time the stockpile crust is disturbed (by mixing, removal, etc.) to prevent dust from becoming airborne.
- 8. The yard surrounding a receiving stockpile and all delivery/removal pathways to and from the receiving stockpile or fill/placement site shall be wetted down as necessary to prevent dust from becoming airborne.

9. A receiving stockpile shall have a surrounding berm, trench, or other barrier to prevent stormwater runoff from carrying particulate solids into nearby open waters. After severe rain events a person on site should look to see if solids have entered state waters (muddy plume) and immediately improve containment as necessary to prevent solids discharge from reoccurring.

Be advised that any wastewater discharges to waters of the state (including contaminated stormwater, sanitary & industrial wastewater) require a permit from DEQ.

- 10. Material removed from a receiving stockpile shall only be used as in accordance with this BMP and with all other permits and applicable rules imposed by local, state, and federal regulating authorities.
- 11. Receiving stockpile owner/operator shall not release this material to any other person or business unless that person or business shall use the material in accordance with this BMP and with all other permits and applicable rules imposed by local, state, and federal regulating authorities.
- 12. Material transported from a receiving stockpile shall be wetted down in the truck or otherwise contained and/or covered so as to prevent dust blowing out onto roadways during transportation.
- 13. A receiving stockpile is intended to be a temporary storage unit only. If the owner/operator ceases to use the material for beneficial use as described in this BMP, the owner/operator must either dispose of the remaining stockpiled material in an approved landfill or give it to another person or business that will utilize the material in accordance with this BMP.
- 14. A receiving stockpile owner/operator must be able to demonstrate that at least 75% of material received in a calendar year has been removed for beneficial use (record keeping in & out). Such information shall be made available to the Department upon inspection.
- 15. Material removed from a receiving stockpile (or received directly from a generator) for fill or placement shall be thoroughly saturated with water, hardened (cured), and compacted or settled at its final resting place. Material shall be kept wet until it is completely cured.
- 16. No one shall mix or bury other regulated solid wastes with barite & cement fill material (i.e. junk, waste tires, construction & demolition debris, etc.) either in a receiving stockpile or at final fill/placement.
- 17. No unhydrated powders shall be placed in any water body.
- 18. Receiving stockpile or fill/placement site owner/operator shall not track mud onto any public roads.
- 19. The owner/operator of any receiving stockpile or fill/placement site shall comply with any and all applicable local, state, and federal laws.
- 20. If virgin powdered cement is managed in a manner constituting disposal, it is subject to the Louisiana Department of Environmental Quality's regulations.