ATTACHMENT 5.A.1.F.

5.A.1.F. PAVEMENT DIAMOND GRINDING SLURRY DISPOSAL

Summary:

This attachment includes a letter of interpretation from NYSDEC and provides supplemental information of the interpretation of solid waste regulations and disposal requirements for pavement diamond grinding slurry disposal.

Regulatory Interpretation:

Slurry Characteristics: “Diamond grinding” is a process used to restore smoothness to concrete (or asphalt) pavement of highways. Slurry consists of fines removed from the pavement and water, originating as the coolant from the abrading process.

- Concrete Slurry – Concrete slurry typically generated has elevated pH levels. An evaluation conducted for CALTRANS indicated initial pH of slurry as 9.4 - 11. Assessment of the changes in pH of the slurry samples under evaporative conditions over 24 hours indicated a lower pH of 8.2 – 9.6.
- Asphalt Slurry – Asphalt contains PAHs (polycyclic aromatic hydrocarbons) which contain harmful compounds, but have extremely low solubility in water. Asphalt is not considered to present a significant threat within recognizable asphalt debris disposed or placed properly, but can cause problems when un-recognizable (such as fines) and/or mixed with other materials such as clean soil.

Solid Waste: The New York State Department of Environmental Conservation (NYSDEC) regulates solid wastes (discarded materials including solid, liquid, semi-solid, and contained gaseous materials) that are disposed by any method including by being discharged, deposited, injected, dumped, spilled, leaked or placed on any land or water. General provisions of the regulation “Solid Waste Management Facilities”, 6 NYCRR Part 360 defines Construction and Demolition (C&D) debris as uncontaminated solid waste resulting from the construction, remodeling, repair and demolition of utilities, structures and roads; and uncontaminated solid waste resulting from land clearing. Concrete and asphalt pavement are specifically listed as components of C&D Debris. With the exception of certain exclusions defined below, C&D debris requires disposal at permitted landfills, registered C&D processing facilities or through generic or case-specific beneficial use determinations (BUDs).

A permit is not required for the disposal of certain “exempt” recognizable C&D at a facility that takes no compensation and operates only during daylight hours. (Additional notification requirements apply on Long Island). This “exempt” C&D is restricted to the following-recognizable uncontaminated debris: recognizable uncontaminated concrete and concrete products (including
steel or fiberglass reinforcing rods that are embedded in the concrete), asphalt pavement, brick, glass, soil and rock. An interpretation was needed on the applicability of this exemption to the slurry which, although chemically containing concrete and resulting from C&D activities, is generated in a liquid state and would be not “recognizable” and readily identifiable as C&D by visual observation.

**Slurry Regulatory Interpretation:** NYSDEC provided interpretation in a February 2003 letter to NYSDOT: The placement of concrete or asphalt slurry from diamond grinding will be considered recognizable concrete/asphalt subject to the exemption provisions of the Construction and Demolition (C&D) debris provisions of 6NYCRR Part 360-7.1 (b) (1)(i) when placed on state property under the control NYSDOT in a manner and location that is in compliance with all other environmental regulations.

**Other Environmental Regulations and Issues** - NYSDEC and other environmental agencies regulate discharges to waterbodies, groundwater, wetlands, flood plains, and buffer zones to these features as well as protection of cultural/historical features. Regulatory issues include:

- **SPDES (State Pollutant Discharge Elimination System) Individual Wastewater Point Source Permit** – SPDES permits are required for discharge of wastewater including wastewater from construction activities to surface or groundwater. Since the content of the slurry would not be acceptable for direct discharge, placement of the slurry must ensure that there is no runoff to surface waters. Note: This pertains to the wastewater discharge SPDES requirements and not to the SPDES general permits for stormwater.
- **Freshwater Wetlands Protection** – Discharge or filling within a wetland or within the 30 meter adjacent buffer area is a regulated activity requiring an Article 24 wetland permit.
- **Surface Water Protection** – Activities must be conducted in manner to prevent disturbance and discharge of pollutants to surface waters. Placement of fill and appropriate sedimentation and erosion control measures during construction shall prevent discharge to surface waters.

**Guidance and additional information:**

Additional procedural, application, design and construction guidance regarding the handling of diamond grinding slurry will be presented in an in EI which is not yet developed. Upon its completion, it will be available on the NYSDOT internet site: [http://www.dot.state.ny.us/cmb/consult/eib/eiindex.html](http://www.dot.state.ny.us/cmb/consult/eib/eiindex.html)

The February 2002 letter of interpretation from NYSDEC follows:
February 7, 2003

Ms. Mary E. Ivy  
Acting Director  
Environmental Analysis Bureau  
New York State Department of Transportation  
State Office Building Campus  
Albany, NY  12232

Dear Ms. Ivy:

Re: Pavement Diamond Grinding Slurry Disposal

We have reviewed your January 10 letter which requests the New York State Department of Environmental Conservation (Department) to confirm the regulatory status under 6 NYCRR Part 360 of asphalt and concrete slurry wastes generated from diamond grinding of the highway surface.

On August 2, 2002, I wrote to David Curtis of the New York State Thruway Authority responding to a project-specific request, and stated that the Department had determined that sufficient latitude for interpretation exists within Part 360 to determine that a site within the New York State Thruway right-of-way, when used for disposal of the concrete and asphalt waste resulting from diamond grinding of the highway surface, could be exempt from 6 NYCRR Part 360. The basis of this determination resides in the ability of the Thruway Authority to maintain control from generation to disposal. Under this precondition, when disposal occurs on Thruway Authority property (i.e., Thruway right-of-way), and under Thruway Authority supervision, the conclusion was reached that the material remains recognizable and, therefore, the site was eligible for exemption from regulation. By maintaining control from generation to disposal, the Thruway Authority was determined to be in a position to state that the debris has not been altered in any way and, therefore, remains recognizable. My letter advised the Thruway Authority that it was essential that Thruway Authority inspectors maintain proper oversight, and that the material only be deposited within the Thruway right-of-way. Only with this level of control could we determine that concrete and asphalt slurry waste qualifies as recognizable, allowing the disposal site to be exempt from regulation under Part 360. In addition, my letter stated that it is important to remember that this material may not result in deposition in a federal or State wetland, or increase turbidity in any surface water body. It further stated that the Thruway Authority, or its contractor, needed to comply with all applicable local, State, or federal law or regulation.
With that as background, the Department’s response to your January 10 request for a non-site-specific or generic regulatory interpretation of the status of sites where placement of asphalt and concrete pavement diamond grindings slurry occurs is as follows:

1. Except for sites in Nassau and Suffolk Counties, the disposal of pavement diamond grinding slurry can occur at a site(s) under the control of a transportation agency, such as, but not limited to, NYSDOT, the Thruway Authority, or municipal (county, city, or town) highway departments provided, however, that said agency provides proper oversight of the generation and placement of the slurry to assure that the slurry is not contaminated with the spill of a petroleum product and is not comingled with other solid waste during the process. The basis of this determination is that under the preconditions above, diamond grinding slurry can be determined to be recognizable and, therefore, the site at which it is placed qualifies for exemption pursuant to 6 NYCRR 360-7.1(b)(1)(i).

2. For pavement slurry grindings proposed for placement within Nassau or Suffolk County, the Department has determined that the diamond grinding slurry falls within the definition of clean fill (see 6 NYCRR 360-8.2(a)(1)), and it follows that the site proposed for placement is exempt from regulation under Part 360, so long as the site is under the ownership or control of the transportation agency; the transportation agency has implemented proper inspection protocols to assure that only pavement diamond grinding slurry is placed at the site; the slurry is not contaminated with the spill of a petroleum product or comingled with other solid waste; and the conditions found in subdivision 360-8.6(b) are met. For the purpose of this item, “transportation agency” includes, but is not limited to, the Thruway Authority, NYSTA, or municipal (county, city, or town) highway departments.

If you have any questions, please call Ed Dassatti, of our Bureau of Solid Waste & Corrective Action, at 402-8660.

Sincerely,

/S/

Stephen Hammond, P.E.
Director
Division of Solid & Hazardous Materials