

**WTC STEEL BID
ADDENDUM # 4
12/3/01**

AMEC STEEL BID ADDENDUM 4

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AMEC STEEL BID ADDENDUM 4

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AMEC STEEL BID ADDENDUM 4

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Best Management Practices (for Recyclers in NJ) for Handling WTC Steel Which May Contain Asbestos in Spray-on Fireproofing (SOF)

NY DEC and NYC EPA have their own set of guidelines that must be adhered to by successful bidders in NY State and/or NY City.

Sampling of SOF Adhering to WTC Steel. Representative samples must be collected on a weekly basis from each recycler who has received WTC scrap in the previous week. Sufficient samples should be collected each week such that a minimum of 5-10% of new SOF arriving at each facility is sampled. No more than one sample should be taken from each steel member tested. Samples should be analyzed using the method cited in 40 CFR 763 Appendix E, Subpart E, Section 1, as is currently being used.

EPA and NJDEP/NJDOH reserve the right to oversee sampling operations or to conduct simultaneous sampling to ensure representative sampling. Sample results must be transmitted to EPA and NJDEP electronically within 24 hours of receipt in a spreadsheet format provided by EPA.

Personal Air Monitoring of Workers. Samples are to be collected and analyzed on a weekly basis from at least 10% of workers. Samples could be taken from workers who are scheduled to work at least 6 hours with WTC scrap on the day of sampling. Whenever possible, samples are to be taken from workers with the greatest number of hours of exposure on the sampling day. In very dusty conditions, sufficient cassettes should be used to get a reasonable estimate of short-term as well as 8 hour exposure. Samples are to be collected and analyzed in accordance with 29CFR 1910, Occupational Exposure to Asbestos and are to be analyzed using Phase Contrast Microscopy (PCM). Sample results must be transmitted reported to EPA and NJDEP within 24 hours of receipt using the spreadsheet provided by EPA.

Air Monitoring in Residential Areas within 1000 feet of Recycling Operations Air samples must be collected once a week from residential areas within 1000 feet of recycling operations. Samples should be taken using 40 CFR 763 Appendix A to Subpart E-- Interim Transmission Electron Microscopy Analytical Methods. Results must be reported to EPA and NJDEP within 24 hours of receipt using the spreadsheet provided by EPA.

Personal Protective Equipment - All staff working with WTC scrap, including cutters and crane operators are advised to wear appropriate PPE. Cutters must wear a full or partial face respirator with cartridges designed to reduce asbestos exposure at all times.

Wetting of Steel Beams. Best efforts must be used to ensure that steel beams which are significantly covered with SOF and which could not be processed without disturbing the SOF must be segregated and wetted with a light mist during all phases of the handling operations which might cause SOF to become dislodged and airborne. This includes unloading from and loading of barges as well as during transportation to and from cutting operations.

Segregation and Sampling of SOF Coated Steel Beams. Beams which contain SOF which is green in color and/or beams which are significantly covered with SOF and which could not be processed without disturbing the SOF must be segregated from other beams. These beams should be marked and sampled individually. Beams which are found to be coated with SOF which contains > 1% asbestos must be handled in accordance with the federal asbestos regulations at 40CFR Part 61.145, subpart M as applicable to demolition and renovation and in accordance with the NJDEP BMPs below.

The following procedures from 40 CFR Part 61, subpart M, must be adhered to when handling asbestos-containing SOF. Any SOF exposed during cutting or disjoining operations must be wetted. During removal of SOF, the SOF must be wetted sufficiently to render it not friable and there must be no visible emissions as the SOF is removed. SOF must be sealed into leak tight containers while it remains wet as specified in the preceding sentence.

SOF Debris on Ground at Recycling Facilities. At end of processing in a specific area, SOF which collects around the facility must be collected, sampled and, depending on whether it is found to contain > 1% asbestos, should be disposed of as either solid waste (all samples showing less than 1% asbestos) or asbestos containing material in accordance with federal regulations at 40 CFR 61.145 (at any sample showing 1% or > 1% asbestos content).

Notification to EPA and NJDEP. If SOF containing asbestos at or > 1% is to be stripped or removed over the federal NESHAPS regulated amount, then written notification is to be provided to

the regulating agencies 10 working days prior to commencement of the stripping operations.