

US EPA ARCHIVE DOCUMENT



March 30, 2009

COM05100

Mr. Richard Kinch  
US Environmental Protection Agency (5306P)  
1200 Pennsylvania Avenue, NW  
Washington, D.C. 20460

RE: Request for Information under Section 104(e) of CERCLA

Dear Mr. Kinch:

Mt. Tom Generating Company, LLC, (Mt. Tom) hereby submits this response to the US EPA's written request for information, received March 17, 2009, regarding existing surface impoundments, so called "management units", that receive liquid-borne coal combustion byproducts (CCB) and that contain free liquids. Mt.Tom is the owner of a 145 MW coal-fired power plant located in Holyoke, Massachusetts. As part of this effort, Mt.Tom has identified three management units located on its property. Two management units are in-ground (below grade) water clarifier basins with impervious liners, known as the Special Basin and the Bottom Ash Basin. The third unit is a concrete Equalization Tank (EQ Tank). It should be noted that the plant's property is bound by the Connecticut River and vacant land or farmland.

Mt. Tom Station was specifically designed so that virtually no fly ash is transported by water; fly ash is collected by an electrostatic precipitator and is trucked off site for beneficial reuse. Only very small quantities of fly ash that originate from infrequent air heater washes and plant wash

downs are transported by water to the concrete EQ Tank and the lined Special Basin for on-site treatment. Nearly all of the water-borne CCB is bottom ash and boiler slag which is sluiced to the in-ground, lined Bottom Ash Basin where solids settle before the clarified water is pH adjusted and discharged to the Connecticut River as authorized by an NPDES permit.

The following responses are provided with respect to the corresponding numbered questions posed in the request for information (attached) and refer to the three management units noted above.

Question #1: There are no dams associated with any management unit that receives liquid-borne CCB; therefore the management units do not have hazard ratings. As noted above, two units are in-ground basins and the third is a concrete tank; therefore dam hazard ratings do not apply.

Question #2: The Special Basin and EQ Tank are integral to on-site waste water treatment facility operations and were commissioned circa 1983 when the existing water treatment facility was put into service. In 2003, one of two existing basins receiving bottom ash and boiler slag was dewatered and decommissioned; the other basin (Bottom Ash Basin) was lined, and a treatment system for effluent pH adjustment was installed as required by Massachusetts DEP.

Question #3: The Special Basin and EQ Tank occasionally (about twice a year) handle very limited quantities of fly ash, primarily from high pressure water washing of the air heaters. Otherwise, these units handle wastewaters containing non-CCB solids and liquids from various plant operations. The Bottom Ash Basin receives bottom ash and boiler slag regularly and acts as a settling pond and storage basin. Solids are removed annually from the Bottom Ash Basin and are reused locally.

Question #4: Professional engineers both designed and supervised the construction of all three management units identified above. The Bottom Ash Basin has a double liner equipped with leak detection.

Question #5: Standard final construction inspections were performed prior to putting the management units into service. No further assessments of the structural integrity of the units have been performed by or for Mt. Tom. This logically follows from the physical design of the units. Visual evaluations of liner integrity are performed by Mt. Tom personnel. In addition, the bottom ash basin is subject to a quarterly leakage report which is sent to the MA DEP. If inter-liner leakage rates exceed threshold values, notification and action, to include professional engineer oversight, is prescribed by the MA DEP. Due to the nature of Mt. Tom's

impoundments, there are no requirements to perform structural integrity evaluations, and therefore no formal inspections are planned.

Question #6: Mt. Tom has no knowledge of any inspection or evaluation of the structural integrity of the management units conducted by any State or Federal regulatory official, nor is Mt. Tom aware of any planned future evaluations. Due to the in-ground nature of the management units and the minimal risk they present to the environment, there would be little reason for regulatory agencies to inspect the management units. Note that regulatory officials are frequently on-site for inspections of other aspects of the facility's operations.

Question #7: No State or Federal regulatory official has inspected or evaluated the structural integrity of the management units. As noted above, the two larger management units are in-ground structures and not dikes or dams; therefore, consequences of failure are low.

Question #8: The following areas, capacities and volumes of the management units were determined from engineering estimates, direct measurements, company records and construction drawings. The volume of materials stored in the EQ Tank is set at zero because the tank is used to temporarily store water-borne CCB that is awaiting wastewater treatment and currently contains no CCB.

1. Bottom Ash Basin

- Surface area: approximately 2.3 acres (at working capacity)
- Storage capacity: approximately 800,000 cubic feet (working capacity)
- Volume of CCB materials stored & date of measurement: 108,000 cubic feet (estimated March 2009)
- Maximum height: zero (below grade)

2. Special Basin

- Surface area: approximately 1.1 acres (at working capacity)
- Storage capacity: approximately 300,000 cubic feet (working capacity)
- Volume of solid materials stored & date of measurement: 68,000 cubic feet, of which approximately 50% is fly ash (estimated March 2009)
- Maximum height: zero (below grade)

3. Equalization Tank

- Surface area: 610 square feet
- Storage capacity: approximately 7300 cubic feet (at 12 ft depth)
- Volume of CCB materials stored & date of measurement: zero (March 2009)

- Maximum height: 13.5 feet above grade

Question #9: Within the past ten years, there have been no known spills or unpermitted releases to surface water or to the land from the management units identified above.

Question #10: The current owner of the Mt. Tom Station is Mt. Tom Generating Company, LLC. The current operator is FirstLight Power Resources Services, LLC.

The signed certification statement is attached as required. Should you have any further questions or concerns, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "John S. Murray", written in a cursive style.

John S. Murray

Manager, Mt. Tom Station

Attachments

I certify that the information contained in this response to EPA's request for information and the accompanying documents is true, accurate, and complete. As to the identified portions of this response for which I cannot personally verify their accuracy, I certify under penalty of law that this response and all attachments were prepared 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, those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Signature: *John S. Murray*  
Name: JOHN S. MURRAY  
Title: STATION MANAGER

This request has been reviewed and approved by the Office of Management and Budget pursuant to the Paperwork Reduction Act, 44 U.S.C., 3501-3520.

Please send your reply to:

Mr. Richard Kinch  
US Environmental Protection Agency (5306P)  
1200 Pennsylvania Avenue, NW  
Washington, DC 20460

If you are using overnight or hand delivery mail, please use the following address:

Mr. Richard Kinch  
US Environmental Protection Agency  
Two Potomac Yard  
2733 S. Crystal Dr.  
5th Floor; N-5783  
Arlington, VA 22202 2733

EPA expects the owners and operators of these units to exercise the utmost care and diligence in examining whether there are any potential concerns at the units and to take appropriate actions to address them. We ask that this effort be a priority at the highest levels of your organization to ensure the protection of public health, safety, and the environment.