

US EPA ARCHIVE DOCUMENT

The Detroit Edison Company
3500 E. Front St., Monroe, MI 48161

Detroit Edison



A DTE Energy Company

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March 26, 2009

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

RE: Request for Information Under Section 104 (e) of the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. 9604(e) – Monroe Power Plant

Dear Mr. Kinch:

Enclosed with this letter are The Detroit Edison Company's ("Detroit Edison") responses to the United States Environmental Protection Agency's ("EPA") Request to Provide Information Pursuant to the authority granted to it under Section 104 (e) of the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA"), 42 U.S.C. 9604(e) with regard to the Monroe Power Plant. Also enclosed is the requested certification signed by an authorized representative of the Monroe Power Plant.

The specific request was for information regarding surface impoundments or similar diked or bermed management unit(s) or management units designated as landfills which receive liquid-borne material from a surface impoundment used for the storage or disposal of residuals or by-products from the combustion of coal, including, but not limited to, fly ash, bottom ash, boiler slag, or flue gas emission control residuals.

Detroit Edison's Monroe Power Plant has two basins relevant to this inquiry. Accordingly, responses to each of the individual questions with respect to each basin have been provided.

Detroit Edison reserves the right to amend or supplement these responses if warranted by any subsequently discovered information or changed circumstances and further reserves the right to object to the scope and breadth of the Information Request, and to limit its efforts to a good faith, duly diligent search for the information requested.

I trust that you will find the enclosures satisfactory. If you have any questions regarding this submission, please contact Detroit Edison's Principal Engineer, Mr. Dennis Leonard at (313)-235-8714.

Yours truly,

Paul R. Tracy

PRT/dmc
Enclosures

cc: Michael J. Solo, Esq.

**Response to Request for Information Under Section 104 (e) of CERCLA
Monroe Power Plant – Fly Ash Basin**

Question 1: Relative to the National Inventory of Dams criteria for High, Significant, Low, or Less than Low Hazard Potential, please provide the rating for each management unit and indicate which State or federal regulatory agency assigned that rating. If the unit does not have a rating, please note that fact.

Response 1: The Michigan Dam Safety Act exempts Coal Ash Impoundments from regulation. The Michigan Environmental Code regulates the Monroe Fly Ash Basin as a Type III landfill. The Code does not have any ratings for such impoundments.

Question 2: What year was each management unit commissioned and expanded?

Response 2: The Monroe Fly Ash Basin began operation in 1974 and was fully constructed in 1975. It has not been expanded.

Question 3: What materials are temporarily or permanently contained in the unit? Use the following categories to respond to this question: (1) fly ash; (2) bottom ash; (3) boiler slag; (4) flue gas emission control residuals; (5) other. If the management unit contains more than one type of material, please identify all that apply. Also, if you identify "other," please specify the other types of materials that are temporarily or permanently contained in the unit(s).

Response 3: Fly Ash is contained in the unit

Question 4: Do you have a Professional Engineer's certification for the safety (structural integrity) of the management unit(s)? Please provide a copy if you have one. If you do not have such a certification, do you have other documentation attesting to the safety (structural integrity) of the management unit(s)? If so, please provide a copy of such documentation.

Response 4: The unit was designed by a Professional Engineer. A Professional Engineer oversaw the construction of the unit. Further, inspections and monitoring of the site is under the supervision of Professional Engineers on the Monroe Power Plant staff. However, no certification exists nor was required by regulation (see response to Question 1).

Question 5: When did the company last assess or evaluate the safety (i.e., structural integrity) of the management unit(s)? Briefly describe the credentials of those conducting the structural integrity assessments/evaluations. Identify actions taken or planned by facility personnel as a result of these assessments or evaluations. If corrective actions were taken, briefly describe the credentials of those performing the corrective actions, whether they were company employees or contractors. If the company plans an assessment or evaluation in the future, when is it expected to occur?

Response 5: The perimeter of the unit is visually inspected on a daily basis by plant personnel under the supervision of Monroe Power Plant Staff Professional Engineers. On a biennial basis, a Registered Surveyor records the movement of permanent monuments that have been placed in critical locations of the berm. Inclinoimeters, also placed in critical locations of the berm, were initially measured annually for the first 20 years of impoundment operation by a Registered Surveyor and are now measured once every 10 years. No action has been necessary to correct

the structural integrity of the basin. The adequacy of the structural integrity was confirmed in a May 18th, 2006 Report by the geotechnical consultant that designed the original basin. While the Structural Integrity of the Basin is adequate, sloughing or surficial erosion has begun on certain sections of the outer embankment. While largely cosmetic, if left unchecked for several years, the sloughing could begin to affect the basin's structural integrity. This sloughing is therefore being addressed by an ongoing evaluation being prepared by another, national, geotechnical engineering firm.

Question 6: When did a State or a Federal regulatory official last inspect or evaluate the safety (structural integrity) of the management unit(s)? If you are aware of a planned state or federal inspection or evaluation in the future, when is it expected to occur? Please identify the Federal or State regulatory agency or department which conducted or is planning the inspection or evaluation. Please provide a copy of the most recent official inspection report or evaluation.

Response 6: As indicated in the response to question 1, the Waste Management Division of the Michigan Department of Environmental Quality oversees Type III landfills, such as the Monroe Fly Ash Basin. Their last inspection occurred on February 23, 2009, as part of their quarterly inspection program. A copy of their inspection report is attached.

Question 7: Have assessments or evaluations, or inspections conducted by State or Federal regulatory officials conducted within the past year uncovered a safety issue(s) with the management unit(s), and, if so, describe the actions that have been or are being taken to deal with the issue or issues. Please provide any documentation that you have for these actions.

Response 7: While no issues associated with the structural integrity of the basin have been uncovered during the last year, a surficial erosion problem has been identified by the Michigan Department of Environmental Quality and is being addressed by the Company. This surficial erosion problem is discussed in more detail in the answer to question 5. The company does not consider this a safety issue.

Question 8: What is the surface area (acres) and total storage capacity of each of the management units? What is the volume of material currently stored in each of the management unit(s). Please provide the date that the volume measurement was taken.

Response 8: The Monroe Ash Basin occupies 410 acres. Approximately two thirds of these 410 acres are filled. The volume of the entire basin is approximately 30 million cubic yards. However, the ICR defines the "total storage capacity" to only be the capacity above the prevailing grade. Approximately 80 % of the basin's volume is above the natural ground level. Consequently, the "total volume" as defined in the ICR is about 80% of 30 million cubic yards, or approximately 24 million cubic yards. This calculation assumes that the base elevation used to calculate the natural grade is the downslope or the lowest based elevation encountered around the perimeter of the impoundment. The ICR requires that this downslope elevation be used. The volume of material currently stored as defined by the ICR, (i.e.; the amount of fly ash currently landfilled above the natural grade) is similarly about 80% of the 20 million cubic yards that has already been filled. There is therefore approximately 16 million cubic yards of currently "stored" ash in the unit above the natural grade.

Question 9: Please provide a brief history of known spills or unpermitted releases from the unit within the last ten years, whether or not these were reported to State or federal regulatory agencies. For purposes of this question, please include only releases to surface water or to the

land (do not include releases to groundwater). Provide a brief history of known spills or unpermitted releases from the unit.

Response 9: There have not been any known spills or unpermitted releases from this unit.

Question 10: Please identify all current legal owner(s) and operator(s) at the facility.

Response 10: Detroit Edison, a wholly owned subsidiary of DTE Energy is the sole owner and operator of the facility.

**Response to Request for Information Under Section 104 (e) of CERCLA
Monroe Power Plant – Bottom Ash Basin**

Question 1: Relative to the National Inventory of Dams criteria for High, Significant, Low, or Less than Low Hazard Potential, please provide the rating for each management unit and indicate which State or federal regulatory agency assigned that rating. If the unit does not have a rating, please note that fact.

Response 1: The following link; http://www.michigan.gov/deq/0,1607,7-135-3313_3684_3723-9515--,00.html describes the type of dam or impoundments that are regulated in Michigan. The link explains that the Michigan statute provides that dams less than 6 feet in height are not regulated. The berms that form a portion of the Monroe Power Station's Bottom Ash basin do not exceed 6 feet in height, and are accordingly, not regulated and have no rating.

Question 2: What year was each management unit commissioned and expanded?

Response 2: The Bottom Ash Basin at the Monroe Power Plant began operation in the early 1970's. It has not subsequently been expanded.

Question 3: What materials are temporarily or permanently contained in the unit? Use the following categories to respond to this question: (1) fly ash; (2) bottom ash; (3) boiler slag; (4) flue gas emission control residuals; (5) other. If the management unit contains more than one type of material, please identify all that apply. Also, if you identify "other," please specify the other types of materials that are temporarily or permanently contained in the unit(s).

Response 3: The unit is a bottom ash basin used to stockpile bottom ash, prior to sale. Additionally, there is a small amount of suspended solids from the bottom ash sluice system that is not reclaimed and there are small amounts of suspended solids from other waste water streams that are deposited in the basin. These other waste water streams are coal pile runoff and low volume wastes. Lastly, approximately 25 years ago, the basin was used as a spoil site for Army Corps of Engineers dredge material. Other than the bottom ash, all other materials would be classified as "other".

Question 4: Do you have a Professional Engineer's certification for the safety (structural integrity) of the management unit(s)? Please provide a copy if you have one. If you do not have such a certification, do you have other documentation attesting to the safety (structural integrity) of the management unit(s)? If so, please provide a copy of such documentation.

Response 4: The unit was designed by a Professional Engineer. A Professional Engineer oversaw the construction of the unit. Further, inspections and monitoring of the site is under the

supervision of Professional Engineers on the Monroe Power Plant staff. However, no certification exists nor was required by regulation (see response to Question 1).

Question 5: When did the company last assess or evaluate the safety (i.e., structural integrity) of the management unit(s)? Briefly describe the credentials of those conducting the structural integrity assessments/evaluations. Identify actions taken or planned by facility personnel as a result of these assessments or evaluations. If corrective actions were taken, briefly describe the credentials of those performing the corrective actions, whether they were company employees or contractors. If the company plans an assessment or evaluation in the future, when is it expected to occur?

Response 5: The perimeter of the unit is visually inspected on a daily basis by plant personnel under the supervision of Professional Engineers from Monroe Power Plant staff. The berm has a massive width relative to its height and stone armament obviating the need for surveyed measurements of dike movement. (The berm is at least 12 feet wide at its crest and much wider at its base. The berm at its maximum is four feet high)

Question 6: When did a State or a Federal regulatory official last inspect or evaluate the safety (structural integrity) of the management unit(s)? If you are aware of a planned state or federal inspection or evaluation in the future, when is it expected to occur? Please identify the Federal or State regulatory agency or department which conducted or is planning the inspection or evaluation. Please provide a copy of the most recent official inspection report or evaluation.

Response 6: The unit does not get inspected by State or Federal officials. The Company is unaware of any requirement for an agency to do so. As indicated in the response to question 1, the minimal height of the berm, exempts it from regulation under the Michigan Dam Safety Act. Further, the bottom ash is exempt from Michigan Solid Waste Regulations so long as it continues to be classified as an "inert material". The Waste Management Division of the Michigan Department of Environmental Quality does not issue permits for inert material management or make inspections of units that have inert material designation because it has been demonstrated to be safe in any reuse scenario. Annual leachate tests are done to verify that the bottom ash continues to be inert, as defined by the Michigan Environmental Code and the Solid Waste Management Rules. The bottom ash is stockpiled on the basin and sold for reuse.

Question 7: Have assessments or evaluations, or inspections conducted by State or Federal regulatory officials conducted within the past year uncovered a safety issue(s) with the management unit(s), and, if so, describe the actions that have been or are being taken to deal with the issue or issues. Please provide any documentation that you have for these actions.

Response 7: No

Question 8: What is the surface area (acres) and total storage capacity of each of the management units? What is the volume of material currently stored in each of the management unit(s). Please provide the date that the volume measurement was taken.

Response 8: The Monroe Bottom Ash Basin occupies 100 acres. About one half of this area is presently empty. The volume of the entire basin is approximately one million cubic yards. One half of the basin's volume is above the natural ground level, consequently the "total volume", as defined in the ICR, is approximately 500,000 cubic yards. The volume of materials currently

stored (defining the volume as only the volume above the natural grade) is approximately 250,000 cubic yards.

Question 9: Please provide a brief history of known spills or unpermitted releases from the unit within the last ten years, whether or not these were reported to State or federal regulatory agencies. For purposes of this question, please include only releases to surface water or to the land (do not include releases to groundwater). Provide a brief history of known spills or unpermitted releases from the unit.

Response 9: There have not been any known spills or unpermitted releases from the bottom ash basin.

Question 10: Please identify all current legal owner(s) and operator(s) at the facility.

Response 10: Detroit Edison, a wholly owned subsidiary of DTE Energy is the sole owner and operator of the facility.

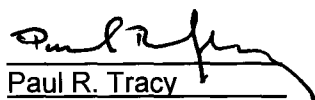
CERTIFICATION

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:

Name:

Title:


Paul R. Tracy
Plant Manager