



RESPONSE TO FREEDOM OF INFORMATION ACT (FOIA) / PRIVACY ACT (PA) REQUEST

2000-0277

1

RESPONSE TYPE FINAL PARTIAL

REQUESTER

Katie A. Moertl

DATE

SEP 19 2000

PART I. -- INFORMATION RELEASED

- No additional agency records subject to the request have been located.
- Requested records are available through another public distribution program. See Comments section.
- APPENDICES **A** Agency records subject to the request that are identified in the listed appendices are already available for public inspection and copying at the NRC Public Document Room.
- APPENDICES **B** Agency records subject to the request that are identified in the listed appendices are being made available for public inspection and copying at the NRC Public Document Room.
- Enclosed is information on how you may obtain access to and the charges for copying records located at the NRC Public Document Room, 2120 L Street, NW, Washington, DC.
- APPENDICES **B** Agency records subject to the request are enclosed.
- Records subject to the request that contain information originated by or of interest to another Federal agency have been referred to that agency (see comments section) for a disclosure determination and direct response to you.
- We are continuing to process your request.
- See Comments.

PART I.A -- FEES

AMOUNT *

\$ 129.45

* See comments for details

- You will be billed by NRC for the amount listed. None. Minimum fee threshold not met.
- You will receive a refund for the amount listed. Fees waived.

PART I.B -- INFORMATION NOT LOCATED OR WITHHELD FROM DISCLOSURE

- No agency records subject to the request have been located.
- Certain information in the requested records is being withheld from disclosure pursuant to the exemptions described in and for the reasons stated in Part II.
- This determination may be appealed within 30 days by writing to the FOIA/PA Officer, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001. Clearly state on the envelope and in the letter that it is a "FOIA/PA Appeal."

PART I.C COMMENTS (Use attached Comments continuation page if required)

The following are the actual fees for processing your request:

Search: \$39.00
 Review: 87.45
 Duplication: 3.00
 TOTAL: \$129.45

You will be billed by the NRC Division of Accounting in the amount noted above.

SIGNATURE - FREEDOM OF INFORMATION ACT AND PRIVACY ACT OFFICER

Carol Ann Reed

APPENDIX A
RECORDS ALREADY AVAILABLE IN THE PDR

<u>NO.</u>	<u>DATE</u>	<u>ACCESSION NUMBER</u>	<u>DESCRIPTION/(PAGE COUNT)</u>
1.	08/10/99	9908130060	Letter from Sherry Lewis, NRC/NMSS, to Denise Gruben, Michigan Department of Natural Resources, subject: Proposed License Conditions for the Michigan Department of Natural Resources Tobico Marsh Site. (2 pages)
2.	08/26/99	9908310251	Letter from Larry Camper, NRC/NMSS, to Kelli Sobel, Michigan Dept. of Natural Resources, subject: Issuance of Source Materials License No. SUC-1581 to Michigan Department of Natural Resources to Possess Contaminated Material at the MDNR Tobico March Site. (78 pages)

**APPENDIX B
RECORDS BEING RELEASED IN THEIR ENTIRETY
(If copyrighted identify with *)**

<u>NO.</u>	<u>DATE</u>	<u>DESCRIPTION/(PAGE COUNT)</u>
1.	Undated	Unsigned letter from Sherry Lewis to Denise Gruben, subject: Summary of August 24, 1999 Meeting re Michigan Dept. of Natural Resources Site Characterization Plan of the Tobico Marsh Site. (8 pages)
2.	08/25/98	Letter from B. Jorgensen to Denise Gruben, subject: NRC Inspection Report 040-09015/9800(DNMS) of the Former Hartley and Hartley Landfill. (3 pages)
3.	05/18/00	Letter from B. Jorgensen to Denise Gruben, subject: NRC Inspection Report 040-09015/2000001(DNMS). (2 pages)
4.	07/20/99	Letter from B. Jorgensen to Denise Gruben, subject: NRC Inspection Report 040-09015/99001(DNMS). (2 pages)

Ms. Denise Gruben, Project Manager
Office of Equal Opportunity and Legal Services
Michigan Department of Natural Resources
P.O. Box 30028
Lansing, MI 48909

SUBJECT: SUMMARY OF AUGUST 24, 1999, MEETING REGARDING MICHIGAN
DEPARTMENT OF NATURAL RESOURCES SITE CHARACTERIZATION PLAN OF
THE TOBICO MARSH SITE

Dear Ms. Gruben:

On August 24, 1999, we met with you and your consultants, Steve Masciulli and Cole Jacobson, to discuss the site characterization plan for the Michigan Department of Natural Resources (MDNR) Tobico Marsh site, formerly known as the state-owned portion of the Hartley and Hartley Landfill. The meeting took place at the U.S. Nuclear Regulatory Commission (NRC) in Rockville, Maryland.

Enclosure 1 includes a summary of the discussions during the August 24, 1999, meeting. Enclosure 2 is the attendance list for the meeting. If you have any questions, please contact me at (301) 415-6619.

Sincerely,

Sherry W. Lewis, General Engineer
Decommissioning Branch
Division of Waste Management
Office of Nuclear Material Safety
and Safeguards

Docket No. 40-9015
License No. SUC-1581

cc: MDNR Distribution List

Enclosures: As stated

Ms. Denise Gruben, Project Manager
Office of Equal Opportunity and Legal Services
Michigan Department of Natural Resources
P.O. Box 30028
Lansing, MI 48909

SUBJECT: SUMMARY OF AUGUST 24, 1999, MEETING REGARDING MICHIGAN
DEPARTMENT OF NATURAL RESOURCES SITE CHARACTERIZATION PLAN AT
THE TOBICO MARSH SITE

Dear Ms. Gruben:

On August 24, 1999, we met with you and your consultants, Steve Masciulli and Cole Jacobson, to discuss the site characterization plan for the Michigan Department of Natural Resources (MDNR) Tobico Marsh site, formerly known as the state-owned portion of the Hartley and Hartley Landfill. The meeting took place at the U.S. Nuclear Regulatory Commission (NRC) in Rockville, Maryland.

Enclosure 1 includes a summary of the discussions during the August 24, 1999, meeting. Enclosure 2 is the attendance list for the meeting. If you have any questions, please contact me at (301) 415-6619.

Sincerely,

Sherry W. Lewis, General Engineer
Decommissioning Branch
Division of Waste Management
Office of Nuclear Material Safety
and Safeguards

Docket No. 40-9015
License No. SUC-1581
cc: MDNR Distribution List
Enclosures: As stated

For PUBLIC:

This document should // ~~should not~~ // be made available to the PUBLIC _____ 8/25/99.

DISTRIBUTION: [*w/ or **w/o encl or att]

Central File PUBLIC NMSS r/f DCB r/f JHolonich RNelson
PSantiago EPogue
MThaggard CMcKenney THarris RClement SMcGuire PJLee/RIII
NOrlando

DOCUMENT NAME: S:\DWM\DCB\Sw\MDNR-MTG.wpd

OFC	DCB	E	DCB	E	DCB		OGC		RIII		DCB
NAME	SLewis/cv		JCopeland		TCJohnson		STreby		EKulzer		LCamper
DATE	8/25/99		8/25/99		/ /99		/ /99		/ /99		/ /99

C = COVER

E = COVER & ENCLOSURE

N = NO COPY

ACNW: YES NO OFFICIAL RECORD COPY
Delete file after distribution: Yes No

Michigan Department of Natural Resources Distribution List - Letter Dated _____

Kelli Sobel, Administrative Services Deputy
Michigan Department of Natural Resources
P.O. Box 30028
Lansing, MI 48909

Tim Bertram, Environmental Quality Analyst
Michigan Department of Environmental Quality
Saginaw Bay District Office
503 N. Euclid Avenue
Bay City, MI 48706

David W. Minnaar, Chief
Radiological Protection Section
Water and Radiological Protection Division
Michigan Department of Environmental Quality
P.O. Box 30630
Lansing, MI 48909-8130

James Forney, Remedial Project Manager
Waste Management, Inc.
17250 Newburgh Road, Suite 100
Livonia, MI 48152-2618

Steve Masciulli, Health Physicist-Industrial Hygienist
Cabrera Services, Inc.
45 Hartford Turnpike, Suite 10
Vernon, CT 06066

Cole T. Jacobson, Senior Environmental Scientist
Harding Lawson Associates
39255 Country Club Drive, Suite B-25
Farmington Hills, MI 48331

SUMMARY OF DISCUSSIONS DURING THE AUGUST 24, 1999, MEETING REGARDING SITE CHARACTERIZATION OF THE MDNR TOBICO MARSH SITE

The purpose and objectives of the meeting are for you to: (1) describe the conceptual model for the Tobico Marsh site and its basis; (2) describe the characterization and final status survey plans and their basis; (3) describe the preliminary dose assessment and its basis; and (4) obtain technical review and comments from us regarding this work and its compliance with NRC requirements.

You provided a historical overview of the Tobico Marsh site that included site description, operational history, and source of radioactive contamination. You also provided a summary of historical surveying and sampling activities that included pre-cap surveys conducted by the State of Michigan and by the Oak Ridge Associated Universities for the NRC. You continued with a summary of recent surveying and sampling activities. The discussion then focused on the Characterization Workplan and the Final Status Survey, and they included preliminary classifications and Draft Regulatory Guide 4006 (DG-4006). Finally, you discussed the preliminary dose assessment that included the site-specific conditions, the projected future land use, the critical exposure group, and the site-specific dose assessments.

We provided feedback to you during the meeting, and our major comments are summarized below.

CHARACTERIZATION WORKPLAN AND FINAL STATUS SURVEY

1. You mentioned that Classes 2 and 3 Survey Units act as buffer zones around Class 1 Survey Units, and all three classes are within the slurry walls. Because of uncertainties in the disposal procedures at the Tobico Marsh site, we suggested that you consider extending the buffer beyond the slurry walls. If you have performed samplings or surveys that indicate that the areas outside the slurry walls are appropriately classified as nonimpacted areas, we recommended that you submit those findings.
2. You stated that you prefer not to remove the clay cap above the waste for site characterization activities. We expressed our concerns with whether you will be able to accurately assess the concentration profile of the radioactive materials and whether you will be able to find elevated areas. However, we did understand the hazardous nature of the waste below the clay cap and your reasons for preferring to not remove the cap for site characterization activities. Still, we emphasized that your survey measurements must demonstrate that the site has no areas of elevated concentrations that could cause a dose exceeding 25 mrem/yr to the average member of the critical group.
3. We asked how you plan to perform the sampling. You responded that you intend to use direct push drilling. We expressed our concerns with worker safety during the drilling because of the hazardous nature of the materials below the clay cap. The drilling may rupture the drums and may expose occupational workers to hazardous conditions. You mentioned that your workers will be RCRA trained and you will institute all reasonable precautions during site characterization activities.
4. You said that you cannot do scanning because it will not detect the radioactive materials below the clay cap. We recommended gathering as much knowledge as possible about the materials on the site to aid in the site characterization process. Also, we recommended that you review Section 2.7.1 in DG-4006 in determining the number of samples you may need for site characterization. We noted that you may increase the

number of boreholes you need to perform if you do not remove the clay cap.

5. You said that you will use DG-4006 recommendations to determine the number of samples you will take. We mentioned that we are not sure now whether the statistics used in DG-4006 is applicable for buried waste because the statistics were designed for two dimensions, not three dimensions.
6. You stated that you planned to use *in situ* sodium iodide gamma spectroscopy to quantify Thorium-232 and Radium-226. We informed you that all previous submittals to us from other licensees, who tried to quantify the concentrations of radionuclides with *in situ* gamma spectroscopy, did not convince us that they were able to quantify the radionuclide concentration using this method. In reports from other licensees, we found that this method was not sensitive enough for a nonhomogeneous medium. However, we have seen this measurement method successfully used as a screening tool.
7. You asked about the next step in the case that you cannot find the source term after you performed the characterization survey. You inquired whether you have to remove the clay cap from the site in order to locate the source term. We responded that the next course of action will depend on how individuals will be exposed in the future. You cannot design measurement and sampling methods before you perform a dose assessment.
8. We asked whether groundwater measurements were taken. You responded that they have been measured during the development of the Leachate Collection and Treatment System and that you will send us a copy of the report after you received your NRC license.

PRELIMINARY DOSE ASSESSMENT

9. You removed the fish pathway because there is no pond on the Tobico Marsh site. However, the default scenario for the Decontamination and Decommissioning (DandD) computer modeling code assumes that a pond will be built on the site in the future. We recommended that you assume that a pond will be constructed onsite in the future in your dose assessment or provide reasons to why a pond will not be constructed onsite.
10. You stated that the Tobico Marsh site will not host permanent residents because of the absence of any onsite water bodies capable of sustaining aquatic life and the poor soil quality preventing agricultural development. We suggested that you need additional information regarding the site to preclude a permanent resident on the site because the marsh could be drained. If you turn off the groundwater and agricultural pathways, you still have to consider the onsite resident pathway unless you can demonstrate that a person cannot live on the site because of physical constraints.
11. You asked if you can take credit for the dilution factor from the clay cap since the radioactive waste is buried underneath. We responded that we would support this approach.

LIST OF ATTENDEES OF AUGUST 24, 1999, MEETING
BETWEEN THE U.S. NUCLEAR REGULATORY COMMISSION
AND MICHIGAN DEPARTMENT OF NATURAL RESOURCES

<u>NAME</u>	<u>AFFILIATION</u>
Denise Gruben	Michigan Department of Natural Resources
Steve Masciulli	Cabrera Services, Inc.
Cole Jacobson	Harding Lawson Associates
Sherry Lewis	NRC/NMSS/DWM/DCB
Timothy Johnson	NRC/NMSS/DWM/DCB
Patricia Santiago	NRC/NMSS/DWM/DCB
Richard Clement	NRC/NMSS/DWM/DCB
Nick Orlando	NRC/NMSS/DWM/DCB
Tim Harris	NRC/NMSS/DWM/DCB
Eric Pogue	NRC/NMSS/DWM/DCB
Mark Thaggard	NRC/NMSS/DWM/HLWB
Christopher McKenney	NRC/NMSS/DWM/HLWB
Steve McGuire	NRC/RES
Ed Kulzer	NRC/RIII
Peter Lee	NRC/RIII
Russ Rotta - via phone	Michigan Department of Environmental Quality
Bob Skowronek - via phone	Michigan Department of Environmental Quality

August 25, 1998

Ms. Denise Gruben
Environmental Quality Specialist
Michigan Department of Natural Resources
Office of Litigation
P. O. Box 30028
Lansing, MI 48909

SUBJECT: NRC INSPECTION REPORT 040-09015/98001(DNMS) OF THE FORMER
HARTLEY AND HARTLEY LANDFILL

Dear Ms. Gruben:

This refers to the routine safety inspection conducted at 2370 Two-Mile Road, Bay County, Michigan, by Mr. Ed Kulzer, Dr. Peter Lee of this office, and Mr. Jack Parrott of the Office of Nuclear Material Safety and Safeguards on August 13, 1998.

The inspection was an examination of activities conducted relating to radiation safety and to compliance with the Commission's rules and regulations and commitments contained in your submittals to NRC. Within these areas, the inspection consisted of discussions with you and a tour of your facility.

No violations of NRC requirements were identified during the course of this inspection.

In accordance with 10 CFR 2.70 of the NRC's "Rules of Practice," a copy of this letter will be placed in the NRC Public Document Room.

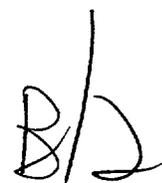
We will gladly discuss any questions you have concerning this inspection.

Sincerely,

Original Signed by W. Snell for
Bruce L. Jorgensen, Chief
Decommissioning Branch

Docket No. 040-09015
Non-Licensee

cc: D. Minnaar, Chief, Michigan Department of
Environmental Quality



DOCUMENT NAME: G:\SEC\MDN98001.DNM

To receive a copy of this document, indicate in the box: "C" = Copy without enclosure "E" = Copy with enclosure "N" = No copy

OFFICE	RIII	RIII	RIII			
--------	------	------	------	--	--	--

NAME	Kulzer:ib	Lee	Jorgensen	
DATE	08/25/98	08/25/98/WGS	08/25/98/WGS	

OFFICIAL RECORD COPY

Distribution:

Docket File

PUBLIC IE-07

S. Wu, NMSS

J. L. Caldwell, RIII

C. D. Pederson, RIII

R. J. Caniano, RIII

RIII Enf. Coordinator

IEO (e-mail)

DOCDESK (e-mail)

Greens

May 18, 2000

Ms. Denise Gruben
Environmental Quality Specialist
Michigan Department of Natural Resources
Office of Litigation
P. O. Box 30028
Lansing, MI 48909

SUBJECT: NRC INSPECTION REPORT 040-09015/2000001(DNMS)

Dear Ms. Gruben:

This refers to the routine safety inspection conducted at 2370 Two-Mile Road, Bay County, Michigan, by Ed Kulzer and Peter Lee of this office on May 11, 2000. The inspectors were accompanied by Sherry Lewis and Sam Nalluswami from the NRC Office of Nuclear Materials Safety and Safeguards.

The inspection was an examination of waste burial cell characterization activities being conducted on site as described in your Characterization Plan submitted to Headquarters during our meeting of August 24, 1999. Within these areas, the inspection consisted of a review of required training records, lab results, and a tour of your facility.

No violations of NRC requirements were identified during the course of this inspection.

The characterization work to date has created 326 holes through the clay cap down to the bottom of the cell. These holes have punctured buried drums potentially releasing of liquids (spent solvents, oils, and others) and increasing the probability of waste migration. Leachate within and outside of the cell needs to be monitored to identify any waste migration and to prevent its spread into the nearby water table.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter will be placed in the NRC Public Electronic Reading Room (PERR) link at the NRC home page, namely ><http://www.nrc.gov/NRC/ADAMS/index.html>.

B/B

D. Gruben

-2-

We will gladly discuss any questions you have concerning this inspection.

Sincerely,

/RA/

Bruce L. Jorgensen, Chief
Decommissioning Branch

Docket No. 040-09015
License No. SUC-01581

cc: D. Minnaar, Chief, Michigan Department of
Environmental Quality

Distribution:
Docket File
PUBLIC IE-07
S. Wu, NMSS
S. Nalluswami, NMSS
J. L. Caldwell, RIII
C. D. Pederson, RIII
RIII Enf. Coordinator
RIII_IRTS (e-mail)
Greens

DOCUMENT NAME: G:\SEC\MDN2000.001.WPD

To receive a copy of this document, indicate in the box: "C" = Copy without enclosure "E" = Copy with enclosure "N" = No copy

OFFICE	RIII	C	RIII	E	RIII	C
NAME	Kulzer:gm	Ed K	Lee		Jorgensen	
DATE	05/18/00		05/18/00		05/18/00	

OFFICIAL RECORD COPY

July 20, 1999

Ms. Denise Gruben
Environmental Quality Specialist
Michigan Department of Natural Resources
Office of Litigation
P. O. Box 30028
Lansing, MI 48909

SUBJECT: NRC INSPECTION REPORT 040-09015/99001(DNMS) OF THE FORMER
HARTLEY AND HARTLEY LANDFILL

Dear Ms. Gruben:

This refers to the routine safety inspection conducted at 2370 Two-Mile Road, Bay County, Michigan, by Mr. Ed Kulzer and Dr. Peter Lee of this office on July 14, 1999.

The inspection was an examination of activities conducted relating to radiation safety and to compliance with the Commission's rules and regulations and commitments contained in your submittals to NRC. Within these areas, the inspection consisted of discussions with you and a tour of your facility.

No violations of NRC requirements were identified during the course of this inspection.

In accordance with 10 CFR 2.70 of the NRC's "Rules of Practice," a copy of this letter will be placed in the NRC Public Document Room.

We will gladly discuss any questions you have concerning this inspection.

Sincerely,

/s/Bruce L. Jorgensen
Bruce L. Jorgensen, Chief
Decommissioning Branch

Docket No. 040-09015
Non-Licensee

cc: D. Minnaar, Chief, Michigan Department of
Environmental Quality

DOCUMENT NAME: G:\SEC\MDN99001.DNM

To receive a copy of this document, indicate in the box: "C" = Copy without enclosure "E" = Copy with enclosure "N" = No copy

OFFICE	RIII	RIII	RIII	C
NAME	Kulzer:dp	Lee	Jorgensen	
DATE	07/10/99	07/24/99	07/12/99	

OFFICIAL RECORD COPY

B/L



D. Gruben

-2-

Distribution:

Docket File
PUBLIC IE-07
S. Wu, NMSS
J. L. Caldwell, RIII
C. D. Pederson, RIII
RIII Enf. Coordinator
IEO (e-mail)
DOCDESK (e-mail)
Greens