

Dr. Morris

Mr. Henderson -

Joe Knotts suggests that this Badalich letter be reassigned to DRL for preparation of the reply, and should be coordinated with DML & possibly RPS.

Do you want to suggest a gist of a reply to DRL before I send this down?

jhc
11/13/70

Mr. Harman

Myron

I suggest that this matter be discussed w Lyall Johnson DML. It appears appropriate that he prepare a response

Tan S

FROM
Minnesota Pollution Control Agency
John F. Badalich, Exec. Director

CONTROL NUMBER
2888

ACTION COMPLETION DEADLINE

DATE OF DOCUMENT
11/1/70

FILE LOCATION

TO
Chairman

ACTION PROCESSING DATES

Acknowledged _____

Interim Report _____

Final _____

INFORMATIONAL COPY DISTRIBUTION

_____ Chairman	_____ ADNS	_____ COM
_____ GM	_____ ADA	_____ SS
_____ Dep. Dir.	_____ OGC	_____ SLR
_____ A. D.	_____ RL	_____ ML

DESCRIPTION **Ltr** ☐ Original ☒ Copy ☐ Other

re info from JM Company that radioactive wastes are buried in Minnesota, and that this is contrary to statement by AEC counsel before ASLE hearing on Monticello that no rad wastes were buried in the State of Minnesota

REMARKS

Prepare reply for signature of the Director of Regulation

Notes REFERRED TO
Shaper E/action
Cys: Johnson
Morris
Yore
Henderson
PMA (50-263)

DATE

11/9

11/18

Is notification to the JCAS recommended? *No*

12/30/70

OFFICE OF THE CHAIRMAN

(Date)

TO:

Dr

Dr

For appropriate handling

Reply for Chairman's signature

For information: GM

✓

Commissioners

✓

DR

Remarks

Julius H. Rubin
For the Chairman

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HOMER C. LUICK,
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MRS. R. C. (DOROTHY) NELSON,
DULUTH
ROBERT C. TUVESON,
ALBERT LEA



**STATE OF MINNESOTA
POLLUTION CONTROL AGENCY
717 DELAWARE STREET S.E.
(OAK AND DELAWARE STREETS S.E.)
MINNEAPOLIS 55440
612-378-1320**

JOHN P. BADALICH, P.E.,
EXECUTIVE DIRECTOR

November 2, 1970

Dr. Glenn T. Seaborg, Chairman
United States Atomic Energy Commission
Washington, D.C. 20545

Dear Mr. Seaborg:

The Minnesota Pollution Control Agency, as you are aware of, is concerned and rightfully so, with all radioactive materials used and disposed of in the State of Minnesota.

At a recent meeting of the Agency, (Attachment No. 1) Mr. Steve J. Gadler of the Agency Board, reported on a statement made by counsel for the Atomic Energy Commission at the Atomic Safety and Licensing Board hearing held in St. Paul, Minnesota on the operational permit for the Northern States Power Company's Monticello Nuclear Generating Plant, that no radioactive wastes were buried in the State of Minnesota.

Mr. Gadler also requested the staff to investigate and report on this as we are aware of the fact that the 3M Company of St. Paul, Minnesota is disposing of spent radioactive materials in rural Pine County, Minnesota under a permit granted to the 3M Company by the former Water Pollution Control Commission.

The 3M Company was requested to file a report, (Attachment No. 2) on the status of this burial and such a report was made to the Agency under date of September 9, 1970, copy enclosed, (Attachment No. 3) and at the September meeting of the Agency, this report was filed with the Agency members for their review and comment.

DR-2888

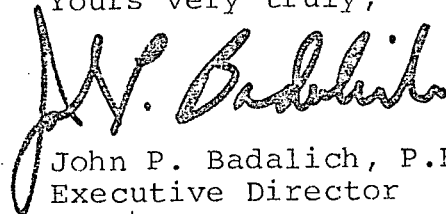
Rec'd Off. Dir. of Reg.
Date 11/5/70
Time 5:30

Dr. Glenn T. Seaborg
November 2, 1970
Page 2

At the October 5, 1970, meeting of the Agency, this matter was further discussed and I was instructed to bring this to the attention of the AEC in light of the statement made here by counsel to the Atomic Safety and Licensing Board. Attachment No. 4 indicates the Agency's position with respect to this as well as requiring an explanation from the AEC as to the conflicting statement and requesting that further action be taken by the AEC in preventing any further burial of radioactive wastes in the State of Minnesota.

Your earliest attention to this matter is greatly appreciated.

Yours very truly,

A handwritten signature in dark ink, appearing to read "J. P. Badalich". The signature is fluid and cursive, with a large initial "J" and "P".

John P. Badalich, P.E.
Executive Director

JPB/ee
Attachments

Sewer Extensions (Continued)

Chanhassen (6573) Burnsville (6574) Roseville (6575) North St. Paul (6576)

Mr. Luick moved and Mr. Fellows seconded the motion to approve these sewer extensions. Motion prevailed.

Stipulations

Minnesota Power and Light Company, Aurora, Duluth and Cohasset Plants

After a presentation from Mr. Lindall, Mr. Tuveson moved and Mr. Packard seconded the motion to approve this stipulation. Following discussion, the motion was carried unanimously.

Scanlon

Following a report from Mr. Lindall and discussion from the members, Mr. Tuveson moved and Mr. Gadler seconded the motion to give Scanlon an additional sixty days (60) for them to make a decision on all of the interim dates of the compliance schedule except for award of a contract for independent works for which an additional thirty days (30) is granted with the final completion date to remain the same. Motion carried.

Madison Lake

Following a report from Mr. Lindall, Mr. Luick moved and Mr. Fellows seconded the motion to approve this stipulation. Motion carried unanimously.

Meeting recessed until 1:30 p.m. for lunch.

Burial of Radioactive Wastes - Pine County

Mr. Gadler then requested the Agency staff to check out the burial of radioactive wastes in 1966 under permit granted to 3M by the Water Pollution Control Commission. These wastes are near Askov in Pine County. Mr. Gadler reported that the AEC stated at the Atomic Safety and Licensing Board hearings that no radioactive waste is buried in Minnesota and none will be. Thus, he is making inquiries into the situation in Pine County and is requesting removal of any radioactive wastes there.

INFORMATIONAL ITEMS

Mr. Badalich announced that Dr. Andersen, Mr. Tuveson and he would be attending the second session of the Federal-State Enforcement Conference on Lake Superior in Duluth, Minnesota on August 12-13, 1970, as conferees.

AGENCY MEMBERS

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MRS. R. C. (DOROTHY) NELSON,
DULUTH
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ALBERT LEA



ATTACHMENT NO. 2

STATE OF MINNESOTA
POLLUTION CONTROL AGENCY

717 DELAWARE STREET S.E.
(OAK AND DELAWARE STREETS S.E.)

MINNEAPOLIS 55440

612-378-1320

JOHN P. BADALICH, P.E.,
EXECUTIVE DIRECTOR

August 27, 1970

Dr. Joe T. Ling
Manager Wager and Sanitary
Engineering Department
900 Bush Avenue
St. Paul, Minnesota

Dear Dr. Ling:

At the regular meeting of the Agency on August 10, 1970, the matter of the burial of radioactive wastes was brought forth by Mr. Steve J. Gadler of the Agency. Mr. Gadler made reference to the burial of certain radioactive material that was undertaken by the 3M Company near Askov, in Pine County in 1966.

The official minutes of the Agency states the following:

"Mr. Gadler then requested the Agency staff to check out the burial of radioactive wastes in 1966 under permit granted to 3M Company by the Water Pollution Control Commission. These wastes are near Askov in Pine County. Mr. Gadler reported that the AEC stated at the Atomic Safety and Licensing Board hearings that no radioactive waste is buried in Minnesota and none will be. Thus, he is making inquiries into the situation in Pine County and is requesting removal of any radioactive wastes there."

As a follow-up to this action, I believe Mr. George Koonce or Mr. Mike Lutz of the Agency's Industrial Waste Section of the Division of Water Quality contacted you regarding this matter.

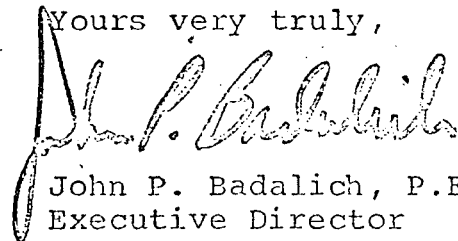
I believe it incumbent upon your company to provide the Agency with an inventory of the waste burial and a memorandum on radioactivity levels in the area attributable to this burial and also other activities relating to this matter from the initial date, 1966, to the present.

Dr. Joe T. Ling
August 27, 1970
Page 2

I would appreciate receiving this report prior to the
September 14, 1970, meeting of the Agency.

Your cooperation in this matter is greatly appreciated.

Yours very truly,

A handwritten signature in dark ink, appearing to read "John P. Badalich". The signature is written in a cursive style with a large, prominent initial "J".

John P. Badalich, P.E.
Executive Director

JPB/ee



25A

GENERAL OFFICES • 3M CENTER • ST. PAUL, MINNESOTA 55101 • TEL. 733-1110

3M COMPANY

P.O. BOX 3331 • 900 BUSH AVENUE • SAINT PAUL, MINNESOTA 55101

P

September 9, 1970

SEP 10 1970

MINN. POLLUTION
CONTROL AGENCYSubject: Pine County
Waste Disposal Area
Kerrick, Minnesota
WPC Permit 5227Mr. John Badalich, P. E.
Executive Director
State of Minnesota
Pollution Control Agency
717 Delaware Street, S. E.
Minneapolis, Minnesota 55440

Dear Mr. Badalich:

I am enclosing a report on the use of our waste disposal area in Pine County, Minnesota, as requested in your letter of August 27, 1970. The present use of our disposal site is on an emergency basis only.

If there are any questions which you may have, please contact me. Please keep us posted on the outcome of any action which the Agency takes on the report.

Yours very truly,

Joseph T. Ling, Ph.D., Director
Environmental Engineering
and Pollution Control

JTL/jb

Enclosure

SEP 10 1970

MINN. POLLUTION
CONTROL AGENCY

Report
on
Waste Disposal Area
Located
in
Pine County, Minnesota - East of Kerrick, Minnesota

3M Company

Background Information

In June 1965 The 3M Company started investigation of potential sites in Minnesota which would be suitable for waste disposal. The requirements for the disposal site were proper geological conditions (an impermeable soil underlain by rock) accessibility by truck transport and isolation from any population center. Initially the site investigations were discussed with the Minnesota Water Pollution Control Commission (MWPPCC). After several potential sites were located personnel from the MWPPCC reviewed the sites in the field with 3M Engineering personnel.

Five hundred twenty acres of land in Section 34, Township 45 North, Range 17 West, Pine County, Minnesota was selected as the site meeting the qualifications. This also was the site which received the best evaluation from the MWPPCC in a letter dated August 11, 1965 signed by L. H. Smith. Another letter from the MWPPCC dated December 27, 1965 approved in principle the type of facility which 3M proposed. On the above basis 3M prepared final plans and specifications which were submitted to the MWPPCC on September 8, 1966. Approval of the plans were received at a MWPPCC meeting held on October 6, 1966. 3M was notified of this action by a letter dated October 10, 1966.

The disposal area consists of a diked area lined with a clay bottom and side slopes, the dimensions were approximately 150' x 250'. The depth of the diked area is 8 feet. There is no overflow from this diked area. The diked area is graded so that storm runoff water is diverted from the diked area. The diked area is accessible by a road and the area is fenced with barbed wire fence. The existing farm type fences around the perimeter of our property has been improved and No Trespassing signs have been placed around the property.

Permit Conditions of WPC #5227

The permit required that there be no discharge of any type from or within the diked area. It also provided that the facility be operated without the development of a nuisance in the area. A paragraph about radioactive materials was included. It indicated that the disposal of radioactive wastes at this site is not prohibited if done in conformance with U. S. Atomic Energy Commission requirements.

3M Use of Disposal Site

The following list is a chronological listing of the events that have taken place at the site.

- (1) December 7, 1966 - Approximately 220 - 55 gallon drums of radioactive material was buried in accordance with A.E.C. regulations. Radioactive wastes consisted of material, equipment and carbon bed material contaminated with natural uranium and thorium. The total amount of natural uranium and thorium oxide buried at this time was 10 pounds and 30 pounds respectively. The total activity of radioactive materials in the burial was 4.83 millicuries, well below the 50 millicurie limitation.

- (2) Letter to MWPC June 21, 1967 advising them of change in our original holding area size. The size was reduced by 200 feet.
- (3) Construction of access road and diked area for liquid wastes was started in July 1967.
- (4) July 18 and 20, 1967 - Burial of the 2nd load of radioactive material. Radioactive wastes disposed of consisted of material, equipment, and piping contaminated with uranium. The total amount of enriched uranium disposed on above dates was 508.3 grams. The activity at this burial was 35.6 millicuries again below the 50 millicuries level for an individual burial.
- (5) On August 18, 1967 78 - 55 gallon drums consisting of non-radioactive liquid and solid wastes were placed into the diked area.
- (6) November 27, 1968 - The burial of the 3rd load of radioactive materials. This consisted of contaminated containers and equipment such as returnable oxygen cylinders, electric motors, tools, piping and ventilation ducts. The total amount of enriched uranium in this burial was 50 grams. The total activity of the radioactive material in this burial was 3.5 millicuries again well below the 50 millicurie limitation.
- (7) November 24, 1969 76 - 55 gallon drums of non-radioactive liquid and solid material were disposed of in the diked area.

A.E.C. Regulations on Radioactive Disposal

3M discussed the disposal of radioactive material with the Minnesota Board of Health. Personnel were aware of our intentions to dispose of radioactive material at our site. It is our understanding that the MWPC could not give formal approval since the State of Minnesota at that time did not have regulations covering the disposal of radioactive material.

The 3M Company has a permit to work with radioactive materials (A.E.C. Special Nuclear Materials License SNM-764 and Source Materials License SMB-239). In accordance with this license the disposal of radioactive materials is outlined in Title 10 Part 20, paragraph 20.304 Code of Federal Regulations.

The A.E.C. regulations spell out the following requirements for low activity radioactive materials.

- (1) Maximum activity per burial limited to 50 millicuries for uranium and thorium.
- (2) Successive burials be separated by horizontal distance of 6 feet.
- (3) A minimum cover of 4 feet of earth over the burial area.
- (4) Not more than 12 burials can be made in any one year.

Summary

The use of the disposal site for radioactive wastes has been on intermittent basis and in accordance with A.E. C. regulations. The total activity of radioactive materials buried on our site was 43.93 millicuries. If all of the radioactive material buried at the 3M disposal site was concentrated in a single point source, the dose rate would be 25 milliroentgens at a distance of one foot. In view of the fact that the point source is covered with 4 feet (minimum) of earth the radiation emitting from a point source would not be discernable above existing natural background radiation. There is, therefore, no radiation hazard to human or wildlife standing directly over the burial sites.

The use of the disposal site for liquid and solid wastes has always been on an intermittent basis. The future use of the site is based on emergency basis.

The following excerpts are from the official minutes
of the October 5, 1970, Agency meeting.

Sewer Extensions

Tyler (6631) Worthington (6633) Goodview (6634) Freeport (6635) Wayzata and Minnetonka (6636) Metropolitan Sewer Board, Anoka, Hennepin, Ramsey and Washington Counties (6638) Pelican Rapids (6640)

Mr. Tuveson moved to approve the above-permits and Mr. Harris seconded the motion. Motion prevailed.

INFORMATIONAL ITEMS

Mr. Badalich reported on the Lake Superior Enforcement Conference held on August 12th and 13th in Duluth. One of the conclusions reached at the conference was that the Reserve Mining Company at Silver Bay, Minnesota and other waste sources in Minnesota are affecting the health and welfare of people in other states and, therefore, constitutes interstate pollution. It was also stated at the conference that Minnesota should be commended on their water pollution abatement program, enforcement and legal actions taken. The technical committee on Water Quality standards were also commended for their work in developing criteria for standards on the open waters of Lake Superior and it was recommended that each state hold public hearings in six months to develop standards for the open waters of Lake Superior. Also, that Reserve Mining Company submit a report to the conferees and the PCA by December 1, 1970, specifying treatment and alternate disposal methods for their tailings that could be utilized to meet state and federal standards and that Reserve Mining Company submit plans and specifications to the conferees and the PCA for construction to meet federal-state standards by September 1, 1971. The dates that Reserve Mining Company must award contracts and complete construction will be determined by the conferees at the next session of the conference.

Following Mr. Badalich's report on Lake Superior and discussion from the members, Mr. Tuveson moved that the adoption of the standards for the open waters of Lake Superior be deferred until such time as the staff and the Federal Water Quality Administration define the need more fully and that the Department of the Interior indicates what the recommendations will be for Wisconsin and Michigan. Mr. Harris seconded the motion and following additional discussion, the motion was carried with Mr. Gadler voting negatively and Mr. Luick abstaining.

The meeting recessed for lunch at 12:30 p.m.

MINUTES OF THE PREVIOUS MEETING

Mr. Luick moved to approve the minutes of the September 14, 1970, Agency meeting. Mr. Harris offered the second and the motion was carried unanimously.

INFORMATIONAL ITEMS

Review of Waste Disposal Permits for Pine County

Mr. Badalich advised that memorandums relative to the disposal of radioactive material by the 3M Company and spent caustic material by Northwestern Refinery Company were submitted to the Agency at the last meeting.

*The following excerpts are from the official minutes of the October 5, 1970, Agency meeting.

X Mr. Gadler mentioned that a statement had been made by the Atomic Energy Commission that no radioactive wastes had been deposited in Minnesota and, in his opinion, they were perjuring themselves. He felt that the MPCA should take some action compelling the AEC to prevent the dumping of radioactive wastes anywhere in the State of Minnesota. It was the consensus that this should be called to the attention of the AEC.

SOLID WASTE

Mr. Tuveson then referred to Mr. Forsberg's report regarding disposable containers. After discussion, Mr. Tuveson moved that the Agency should adopt the policy and support the concept of recycling of wastes as proposed by the Minneapolis City Council and support the sale of returnable containers if necessary. Mrs. Nelson seconded the motion and it was carried unanimously.

WATER QUALITY

Summary of Hearing and Findings of Fact on Regulation WPC-25 and 32.

Mr. Badalich advised that the staff is preparing the findings of fact, and conclusions relative to these regulations and that the comments had been sent to the members by persons who had offered testimony.

Aerated Pond Study

Mr. Badalich stated that this study and report has been completed by the consultant and that this is a good method of waste treatment. He also advised that from the evaluation the consultant has made of the ones existing in Minnesota, it appears that this method of waste treatment will be used more extensively in the future.

LEGAL ACTIONS

Mr. Robert Lindall gave a report on the current status of the litigation involving the Mengelkock Company in New Brighton. Following discussion, and a presentation from Mr. Wiik, Mr. Luick moved that the staff initiate legal action against the Chicago North Western Railway at Hutchinson, Gordon Rendering Company in New Brighton and the Minneapolis Hide and Tallow Company also of New Brighton, Minnesota. Mr. Harris seconded the motion and it was carried unanimously.

WATER QUALITY

Alexandria Irrigation Project

Mr. John McQuire reported on this project. He stated that this is a waste treatment project utilizing a spray irrigation system and that Alexandria is seeking federal funds to undertake this as a research and demonstration project. Following his presentation and discussion by the members, Mr. Luick moved to endorse the grant application for Alexandria for this spray irrigation project with the stipulation that if the project fails, the City of Alexandria must meet Agency standards for treatment facilities. Mr. Packard seconded the motion and it was carried.