



Engineers & Scientists
Environmental Services
Waste Management
Water Resources
Site Development
Special Structures
Geotechnical Analysis

OFFICE COPY

October 25, 1989

Ms. Theresa Evanson
Environmental Response & Repair Section
Bureau of Solid & Hazardous Waste Management
Wisconsin Department of Natural Resources
101 South Webster Street, GEF II Building
Madison, Wisconsin 53707

Re: Interim Remedial Measures
Refuse Hideaway Landfill
Agreement No. 81217.89-2
Job No. 13928.42

RECEIVED

OCT 26 1989

BUREAU OF SOLID -
HAZARDOUS WASTE MANAGEMENT

Dear Ms. Evanson:

Enclosed is Warzyn's Monthly Progress Report for professional services provided and expenses incurred in the period ending September 29, 1989 for interim remedial measures associated with the Refuse Hideaway Landfill project. This progress report should be reviewed in conjunction with our invoice for this period submitted in our meeting on October 23, 1989. In the future, a progress report will accompany the invoice at the time of submittal.

If you have any questions, please call.

Sincerely,

WARZYN ENGINEERING INC.

A handwritten signature in blue ink that reads "S.C. Termont-Schenk".

S.C. Termont-Schenk, P.E.
Administrative Manager

A handwritten signature in brown ink that reads "Joel V. Schittone".

Joel V. Schittone, P.E.
Project Manager

STS/dlk/JVS/TFL
[wpmisc-110-31]
13928.42

Enclosure: As Stated



MONTHLY PROJECT REPORT

WARZYN ENGINEERING INC. • ONE SCIENCE COURT • UNIVERSITY RESEARCH PARK • P.O. BOX 5385 • MADISON, WISCONSIN 53705

Monthly Project Report - September 1989 Refuse Hideaway Landfill Interim Remedial Measures

Project Status:

Agreement No. 81217.89-2 was executed on September 13, 1989. Project work was commenced by Warzyn to effectively meet the demanding schedule of this project. Work is underway on the following subtasks:

- Point-of-Entry Treatment Units - Monitoring and analysis of raw water at each of the three residences with affected water supply was completed. Review of filtration technologies has been initiated.
- Alternative Water Supply - Initial contacts have been made to assess the technical and administrative feasibility of providing permanent, alternative off-site sources of potable water for the three affected residences.
- Sampling and Analysis of Residential Wells - An informational community relations leaflet, and well questionnaire and letter were prepared by Warzyn for distribution to the forty-three private well owners whose wells are to be sampled in early October.
- Leachate Treatment Agreement - Initial contacts have been made with MMSD and WDNR personnel on this issue.
- Evaluate Alternative Gas and Leachate Collection System Designs - A significant effort was required to develop several alternative "winterized" designs and to estimate and compare associated construction and engineering costs.
- Design of Partial Gas and Leachate Collection System - Work on the design of the partial system has commenced coincidentally with the evaluation of alternative designs.
- Installation of Partial System - Work on this subtask has mainly been focused on the purchase of the leachate holding tank and contract negotiations with our selected subcontractor.
- Health and Safety - Preparation of a site Health and Safety Plan has been substantially completed.

- Design of Full Gas and Leachate Extraction System - As a result of efforts to prepare and evaluate partial system design alternatives, a conceptual full-system design was prepared. An aerial survey was performed and a current topographic map was prepared for design of the conceptual full-system design.
- Waste Characterization - Warzyn was advised by WDNR that refuse excavated during the construction process could not be redispersed on-site without characterization. We have reviewed the sampling and analytical procedures necessary to successfully characterize refuse and evaluated the potential costs for disposal should characterization indicate the refuse is hazardous.
- Compilation of Private Well Logs - Well logs were gathered from the State Geologic Survey office and collated by Section, by those within one mile of the site and those farther than one mile away.

Difficulties Encountered

The originally proposed partial extraction system was not feasible with the current project schedule (i.e., winter operation) and other alternatives had to be considered.

Difficulties Resolved

A number of alternative designs were prepared and will be presented as a Revised Scope of Work in early October.

Activities For Next Month

Activities expected to occur over the next month include:

- Carry out a pilot water filtration system at the Schultz residence.
- Sample and analyze private residential wells within one mile of the project site and provide results to WDNR.
- Review alternative permanent water supply options and evaluate relative merits of each.
- Substantially complete design of the partial gas and leachate extraction system.
- Purchase major components of hardware for partial extraction system.
- Finalize subcontract agreements for point-of-entry treatment units and partial extraction system.
- Finalize Health and Safety Plan.
- Finalize leachate treatment agreement.

October 25, 1989

-3-

13928.42

Key Personnel Changes

No changes of key personnel are anticipated.

Current Period Fees

Fees for the current period are \$73,752.17 (see invoice submitted October 23, 1989).

Cumulative Fees

Cumulative fees are \$73,752.17.

STS/d1k/JVS/TFL
[wpmisc-110-31a]
13928.42

WARZYN



Engineers & Scientists
Environmental Services
Waste Management
Water Resources
Site Development
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Geotechnical Analysis

→ Sally/File ^{ERF}

November 13, 1989

Ms. Theresa A. Evanson
Wisconsin Department of Natural Resources
Environmental Response & Repair Section
Bureau of Solid Waste Management
101 South Webster Street, GEF II, SW/3
Madison, Wisconsin 53707

RECEIVED
NOV 14 1989
BUREAU OF SOLID -
HAZARDOUS WASTE MANAGEMENT

Re: Interim Remedial Measures
Refuse Hideaway Landfill
Agreement No. 81217.89-2
Job 13928.41

Dear Ms. Evanson:

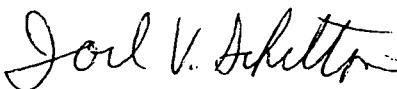
Enclosed is Warzyn's Monthly Progress Report, Invoice and completed WDNR form (Invoice for Professional Services, Request No. 3), for services and expenses regarding the Refuse Hideaway Site Interim Remedial Measures.

If you have any questions regarding this invoice, please contact us immediately.

Sincerely,

WARZYN ENGINEERING INC.


Steven C. Termont-Schenk, P.E.
Administrative Manager


Joel V. Schittone, P.E.
Project Manager

STS/bcn/SGW
[skb-111-95]
13928.49

Enclosures

Warzyn Engineering Inc.
One Science Court
University Research Park
P.O. Box 5385
Madison, Wisconsin 53705
(608) 273-0440



MONTHLY PROJECT REPORT

WARZYN ENGINEERING INC. • ONE SCIENCE COURT • UNIVERSITY RESEARCH PARK • P.O. BOX 5385 • MADISON, WISCONSIN 53705

Monthly Project Report - October 1989 Refuse Hideaway Landfill Interim Remedial Measures/Gas Monitoring and Community Relations

Project Status:

Project work by Warzyn this month was on the following subtasks:

- Point-of-Entry Treatment Units - A pilot water filtration system, preliminarily proposed for each of the three residences with affected water supplies was tested at the Schultz residence as detailed in Work Order No. 2 (Agreement No. 81217.89-2) which was executed this month. Review of filtration technologies has been initiated. Bacteriological testing was retested at the Stoppleworth and Wallin/Swanson residences.
- Alternative Water Supply - The technical and administrative feasibility of providing permanent, alternative sources of potable water for the three affected residences was near completion and an internal draft report prepared.
- Sampling and Analysis of Residential Wells - In October Warzyn sampled and analyzed the wells of forty-three private well owners identified by the WDNR. Results will be transmitted in early November.
- Leachate Treatment Agreement - Further contacts have been made with MMSD and WDNR personnel on this issue and a Warzyn Project Engineer will be attending a Public Hearing on November 3, 1989 at which time proposed effluent limits will be discussed.
- Evaluate Alternative Gas and Leachate Extraction System Designs - As a result of the significant effort put into evaluation of several alternative "winterized" designs and to estimate and compare associated construction and engineering costs a Revised Scope of Work was submitted. This effort resulted in execution of Work Order No. 3 (Agreement No. 81217.89-2) which was also executed this month.
- Design of Partial Gas and Leachate Extraction System - The basic design of the partial system was essentially completed during this period. Draft design drawings and calculations will be submitted in early November. A draft of the design text will be submitted approximately one week later.

- Installation of Partial System - Work on this subtask has mainly been focused on the specification, evaluation and purchase of the leachate holding tank, blower, and flare. The leachate holding tank was ordered in this period and the blower and flare will be ordered in early November. Coordination with our Subcontractor continued this period.
- Health and Safety - The site Health and Safety Plan was revised to reflect the "Revised Scope of Work" (Work Order No. 3) and will be submitted to the WDNR in early November.
- Design of Full Gas and Leachate Extraction System - As a result of partial system design activities, a number of full-system design considerations were evaluated.
- Waste Characterization - Warzyn prepared a waste sampling, handling and characterization protocol this period. This documentation will be presented with the design report in November.
- Warzyn prepared a new Contract, including updated Terms and Conditions, work scopes and cost estimates for a proposed preventative gas monitoring program and a community relations program.

Difficulties Encountered

No difficulties were encountered in this period.

Difficulties Resolved

No difficulties required resolution.

Additional Scope Activities

On October 23, 1989 Terry Evanson informed Joel Schittone of Warzyn that John DeBeck authorized the WDNR to move construction materials located at the Project Site which are in the proposed locations of partial system equipment. Warzyn was directed by Ms. Evanson to contact Mr. DeBeck and arrange a meeting on-site to discuss where the materials should be moved and to then move the materials.

On October 31, 1989 Joel Schittone and John Karsten of Terra met with Sue Fisher and John Debeck on-site to discuss the above. Warzyn will prepare and submit a Work Order in November to incorporate these activities into the Contract work scope and costs.

Activities For Next Month

Activities expected to occur over the next month include:

- Report results of a pilot water filtration system at the Schultz residence and prepare DILHR and WDNR product applications.



- Transmit WDNR results of analytical testing of private residential wells within one mile of the project site.
- Report on our review of alternative permanent water supply options including an evaluation of relative merits of each.
- Complete design of the partial gas and leachate extraction system.
- Order remaining equipment for the partial gas and leachate extraction system.
- Finalize subcontract agreements for partial extraction system.
- Submit Health and Safety Plan to WDNR.
- Direct a Health and Safety meeting on-site.
- Commence construction of partial gas and leachate extraction system on-site.
- Report on progress of leachate treatment agreement or assist on completion of an agreement, as appropriate.
- Prepare Community Relations Contact Sheet, Press Release and Fact Sheet. Organize and assist at Public Officials and Public Meetings on November 13 to be held at West Middleton Elementary School.

Key Personnel Changes

No changes of key personnel are anticipated.

Current Period Fees

Fees for the current period are \$34,800.15 (see invoice submitted November 2, 1989) and \$104,945.54 (comprised of \$95,645.87 on Agreement No. 81217.89-2 and \$9,299.67 on Agreement No. 81217.89-3, both submitted November 13, 1989).

Cumulative Fees

Cumulative fees are \$213,619.34. It should be noted that costs accrued to date are significantly in excess of our estimated costs for this stage of the contract. We assume that the effort at this early stage will expedite the construction documentation and design of full system subtasks.

STS/bcn/JVS/TFL
[wpmisc-110-31a]
13928.41



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NOV 14 1989

BUREAU OF SOLID -
HAZARDOUS WASTE MANAGEMENT

November 13, 1989

Ms. Theresa A. Evanson
Wisconsin Department of Natural Resources
Environmental Response & Repair Section
Bureau of Solid Waste Management
101 South Webster Street, GEF II, SW/3
Madison, Wisconsin 53707

Re: Gas Monitoring Program and Community Relations Activities
Refuse Hideaway Landfill
Agreement No. 81217.89-3
Job 13928.70

Dear Ms. Evanson:

Enclosed is Warzyn's Monthly Progress Report, Invoice and completed WDNR form (Invoice for Professional Services, Request No. 1), for services and expenses regarding the gas monitoring and community relations activities.

If you have any questions, please call us immediately.

Sincerely,

WARZYN ENGINEERING INC.

Steven C. Termont-Schenk, P.E.
Administrative Manager

Joel V. Schittone, P.E.
Project Manager

STS/bcn/SGW
[skb-111-95]
13928.49

Enclosures

Warzyn Engineering Inc.
One Science Court
University Research Park
P.O. Box 5385
Madison, Wisconsin 53705
(608) 273-0440



MONTHLY PROJECT REPORT

WARZYN ENGINEERING INC. • ONE SCIENCE COURT • UNIVERSITY RESEARCH PARK • P.O. BOX 5385 • MADISON, WISCONSIN 53705

Monthly Project Report - October 1989 Refuse Hideaway Landfill Interim Remedial Measures/Gas Monitoring and Community Relations

Project Status:

Project work by Warzyn this month was on the following subtasks:

- Point-of-Entry Treatment Units - A pilot water filtration system, preliminarily proposed for each of the three residences with affected water supplies was tested at the Schultz residence as detailed in Work Order No. 2 (Agreement No. 81217.89-2) which was executed this month. Review of filtration technologies has been initiated. Bacteriological testing was retested at the Stoppleworth and Wallin/Swanson residences.
- Alternative Water Supply - The technical and administrative feasibility of providing permanent, alternative sources of potable water for the three affected residences was near completion and an internal draft report prepared.
- Sampling and Analysis of Residential Wells - In October Warzyn sampled and analyzed the wells of forty-three private well owners identified by the WDNR. Results will be transmitted in early November.
- Leachate Treatment Agreement - Further contacts have been made with MMSD and WDNR personnel on this issue and a Warzyn Project Engineer will be attending a Public Hearing on November 3, 1989 at which time proposed effluent limits will be discussed.
- Evaluate Alternative Gas and Leachate Extraction System Designs - As a result of the significant effort put into evaluation of several alternative "winterized" designs and to estimate and compare associated construction and engineering costs a Revised Scope of Work was submitted. This effort resulted in execution of Work Order No. 3 (Agreement No. 81217.89-2) which was also executed this month.
- Design of Partial Gas and Leachate Extraction System - The basic design of the partial system was essentially completed during this period. Draft design drawings and calculations will be submitted in early November. A draft of the design text will be submitted approximately one week later.

- Installation of Partial System - Work on this subtask has mainly been focused on the specification, evaluation and purchase of the leachate holding tank, blower, and flare. The leachate holding tank was ordered in this period and the blower and flare will be ordered in early November. Coordination with our Subcontractor continued this period.
- Health and Safety - The site Health and Safety Plan was revised to reflect the "Revised Scope of Work" (Work Order No. 3) and will be submitted to the WDNR in early November.
- Design of Full Gas and Leachate Extraction System - As a result of partial system design activities, a number of full-system design considerations were evaluated.
- Waste Characterization - Warzyn prepared a waste sampling, handling and characterization protocol this period. This documentation will be presented with the design report in November.
- Warzyn prepared a new Contract, including updated Terms and Conditions, work scopes and cost estimates for a proposed preventative gas monitoring program and a community relations program.

Difficulties Encountered

No difficulties were encountered in this period.

Difficulties Resolved

No difficulties required resolution.

Additional Scope Activities

On October 23, 1989 Terry Evanson informed Joel Schittone of Warzyn that John DeBeck authorized the WDNR to move construction materials located at the Project Site which are in the proposed locations of partial system equipment. Warzyn was directed by Ms. Evanson to contact Mr. DeBeck and arrange a meeting on-site to discuss where the materials should be moved and to then move the materials.

On October 31, 1989 Joel Schittone and John Karsten of Terra met with Sue Fisher and John Debeck on-site to discuss the above. Warzyn will prepare and submit a Work Order in November to incorporate these activities into the Contract work scope and costs.

Activities For Next Month

Activities expected to occur over the next month include:

- Report results of a pilot water filtration system at the Schultz residence and prepare DILHR and WDNR product applications.



- Transmit WDNR results of analytical testing of private residential wells within one mile of the project site.
- Report on our review of alternative permanent water supply options including an evaluation of relative merits of each.
- Complete design of the partial gas and leachate extraction system.
- Order remaining equipment for the partial gas and leachate extraction system.
- Finalize subcontract agreements for partial extraction system.
- Submit Health and Safety Plan to WDNR.
- Direct a Health and Safety meeting on-site.
- Commence construction of partial gas and leachate extraction system on-site.
- Report on progress of leachate treatment agreement or assist on completion of an agreement, as appropriate.
- Prepare Community Relations Contact Sheet, Press Release and Fact Sheet. Organize and assist at Public Officials and Public Meetings on November 13 to be held at West Middleton Elementary School.

Key Personnel Changes

No changes of key personnel are anticipated.

Current Period Fees

Fees for the current period are \$34,800.15 (see invoice submitted November 2, 1989) and \$104,945.54 (comprised of \$95,645.87 on Agreement No. 81217.89-2 and \$9,299.67 on Agreement No. 81217.89-3, both submitted November 13, 1989).

Cumulative Fees

Cumulative fees are \$213,619.34. It should be noted that costs accrued to date are significantly in excess of our estimated costs for this stage of the contract. We assume that the effort at this early stage will expedite the construction documentation and design of full system subtasks.

STS/bcn/JVS/TFL
[wpmisc-110-31a]
13928.41



WARZYN



Engineers & Scientists
Environmental Services
Waste Management
Water Resources
Site Development
Special Structures
Geotechnical Analysis

December 21, 1989

→ Ms. Theresa A. Evanson
Wisconsin Department of Natural Resources
Environmental Response & Repair Section
Bureau of Solid Waste Management
101 South Webster Street, GEF II, SW/3
P.O. Box 7921
Madison, Wisconsin 53707

Re: Interim Remedial Measures
Refuse Hideaway Landfill
Agreement No. 81217.89-2
Job 13928.42

Dear Ms. Evanson:

Enclosed is Warzyn's Monthly Progress Report, Invoice and completed WDNR form (Invoice for Professional Services, Request No. 4), for services and expenses regarding the Refuse Hideaway Landfill Interim Remedial Measures.

If you have any questions regarding this invoice, please contact us immediately.

Sincerely,

WARZYN ENGINEERING INC.

Steven C. Termont-Schenk, P.E.
Administrative Manager

Joel V. Schittone, P.E.
Project Manager

STS/kjw/JVS/TFL
[jlv-112-93]

Enclosures: As stated

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DEC 27 1989

Bureau of Solid Waste Management
HAZARDOUS WASTE MANAGEMENT



MONTHLY PROJECT REPORT

WARZYN ENGINEERING INC. • ONE SCIENCE COURT • UNIVERSITY RESEARCH PARK • P.O. BOX 5385 • MADISON, WISCONSIN 53705

**Monthly Project Report - November 1989
Refuse Hideaway Landfill
Interim Remedial Measures
Agreement No. 81217.89-2**

RECEIVED
DEC 27 1989
WARZYN ENGINEERING INC.
UNIVERSITY RESEARCH PARK
MADISON, WISCONSIN 53705

Project Status:

Project work by Warzyn this month was on the following subtasks:

- Point-of-Entry Treatment Units - A report entitled "Report and DILHR/WDNR Applications, Point-of-Entry Water Treatment" was submitted during this period which summarized our review of filtration technologies, pilot water filtration system results and presented plumbing applications which were concurrently submitted to DILHR and WDNR.
- Alternative Water Supply - An internal draft report was prepared which addressed the technical and administrative feasibility of providing permanent, alternative sources of potable water for the three affected residences.
- Sampling and Analysis of Residential Wells - Results of the first round of analyses for the wells of forty-three private well owners identified by the WDNR, sampled by Warzyn in October, were transmitted to the WDNR.
- Leachate Treatment Agreement - The MMSD sent a letter to Warzyn requesting that two samples of leachate be analyzed for zinc and the results be submitted for their review. Subsequently, Warzyn was instructed by MMSD to analyze for cyanide and nickel and we attempted to gather leachate samples from the 3 existing head wells on-site. All wells were obstructed or kinked and could not be sampled by a bailer. Therefore, samples will be gathered during construction activities in December.
- Design of Partial Gas and Leachate Extraction System - The design of the partial system was substantially completed. Draft design drawings and calculations were submitted during this period and reviewed by the WDNR. Warzyn prepared responses to WDNR comments, and forwarded them to Sue Fisher in this period. The final design document for the partial system will be submitted in December.

- Installation of Partial System - Activities which were performed include:
 - Ordered the blower and flare.
 - Relocated materials stored on the property leased by Speedway Sand and Gravel.
 - Grade staked the proposed site features.
 - Rough graded and placed gravel in the blower and flare stations.
 - Prepared access "bench" on side slopes for access for wells and buried piping.
 - Prepared refuse containment cell (disposal area).
 - Health and Safety - The site Health and Safety Plan was submitted to the WDNR in early November.

Difficulties Encountered

No difficulties were encountered in this period.

Difficulties Resolved

No difficulties required resolution.

Additional Scope Activities

On October 31, 1989 Joel Schittone and John Karsten of Terra met with Sue Fisher and John Debeck to discuss where the materials stored on the property leased by Speedway Sand and Gravel should be relocated. In addition, as a result of WDNR review of the partial system design, Warzyn has added provision of well head assembly protection. Warzyn prepared and submitted Work Order No. 4 on November 16, 1989 to incorporate these activities into the Contract work scope and costs.

The MMSD required (as stated in their letter to Warzyn dated November 16, 1989 and in subsequent telephone conversations) that two additional leachate samples be gathered and tested for zinc, cyanide and nickel. Warzyn sent a Staff Scientist to the Site on November 29 to gather these samples and to measure leachate levels in the three existing leachate head wells located on-site (LH-1, 2 and 3). Only leachate head well LH-2 was accessible for measuring a leachate head level and it was not possible to obtain a leachate sample (even with a small, thin bailer) from either of the three wells. The existing leachate head wells appear to be constructed of Schedule 40 PVC pipe (a relatively thin-walled pipe) and are apparently inaccessible due to obstructions and/or kinks or bonds caused by differential settlement within the landfill. Warzyn specifically excluded sampling and testing of leachate in the May 1989 proposal in which it was assumed that the existing information and testing would be acceptable to the MMSD.

Activities For Next Month

Activities expected to occur over the next month include:

- Sample and analyze water samples from Spark-L-Pure point-of-entry treatment units on approximately December 14, 1989.



- Report on our review of alternative permanent water supply options including an evaluation of relative merits of each.
- Submit the partial gas and leachate extraction system engineering design document.
- Finalize subcontract agreements for partial extraction system.
- Install extraction and monitoring wells, gas header and leachate/condensate conveyance piping and leachate holding tank, perform waste characterization sampling and analyses, and construct other miscellaneous components of the partial extraction system on-site.
- Direct a Health and Safety meeting on-site.
- Report on progress of leachate treatment agreement or assist on completion of an agreement, as appropriate.

Key Personnel Changes

No changes of key personnel are anticipated.

Current Period Fees

Fees for the current period are \$65,495.21 (see invoice submitted December 21, 1989).

Cumulative Fees

Cumulative fees are \$269,693.40.

STS/kjw/JVS/TFL
[jlv-112-93a]



WARZYN

Engineers & Scientists
Environmental Services
Waste Management
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December 21, 1989

Ms. Theresa A. Evanson
Wisconsin Department of Natural Resources
Environmental Response & Repair Section
Bureau of Solid Waste Management
101 South Webster Street, GEF II, SW/3
Madison, Wisconsin 53707

Re: Gas Monitoring Program and Community Relations Activities
Refuse Hideaway Landfill
Agreement No. 81217.89-3
Job 13928.70

Dear Ms. Evanson:

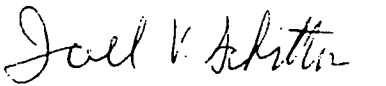
Enclosed is Warzyn's Monthly Progress Report, Invoice and completed WDNR form (Invoice for Professional Services, Request No. 2), for services and expenses regarding the gas monitoring and community relations activities for the Refuse Hideaway Landfill project.

If you have any questions, please call us immediately.

Sincerely,

WARZYN ENGINEERING INC.


Steven C. Termont-Schenk, P.E.
Administrative Manager


Joel V. Schittone, P.E.
Project Manager

STS/kjw/TFL
[skb-111-95]

Enclosures: As Stated

RECEIVED
DEC 27 1989
BUREAU OF SOLID WASTE MANAGEMENT
WISCONSIN DEPARTMENT OF NATURAL RESOURCES



MONTHLY PROJECT REPORT

WARZYN ENGINEERING INC. • ONE SCIENCE COURT • UNIVERSITY RESEARCH PARK • P.O. BOX 5385 • MADISON, WISCONSIN 53705

Monthly Project Report - November 1989
Refuse Hideaway Landfill
Gas Monitoring and Community Relations
Agreement No. 81217.89-3

RECEIVED
DECEMBER 7 1989

Project Status:

Project work by Warzyn this month includes:

- Community Relations - A mailing list was developed with input from the WDNR which includes interest groups, private citizens and public officials. During the month of November, a Fact Sheet and a Meetings/Contacts Sheet were prepared and distributed to all parties listed on the mailing list. Letters to public officials and reminder letters were sent to public officials advising them of the November 13 Public Officials meeting. Coordination of facility and meeting dates were performed in this period. Public officials and public meetings were held at West Middleton Elementary School on November 13. As a result of these meetings, Warzyn documented the questions which were asked at the meetings. Warzyn updated the mailing list to include the list provided by the Citizens to Save the Black Earth Creek Watershed Association, with additions requested by WDNR.

Copies of all correspondence and notification materials were distributed to the WDNR.

- Gas monitoring - Review of the existing monitoring data, potential migration pathways and preparation of a draft gas monitoring plan was completed this month.

Difficulties Encountered

No difficulties were encountered in this period.

Difficulties Resolved

No difficulties required resolution.

Additional Scope Activities

There were no additional scope activities during this period.

Activities For Next Month

Activities expected to occur over the next month include:

- Warzyn and WDNR staff to be at West Middleton Elementary School on December 19 for a Technical Staff Availability Session. Warzyn to prepare letters to notify interested groups of this session and to contact the media.
- Gas monitoring work will be initiated in December around the Refuse Hideaway Landfill site in accordance with the gas monitoring program to be submitted in December.

Key Personnel Changes

No changes of key personnel are anticipated.

Current Period Fees

Fees for the current period are \$20,513.70 (see invoice submitted December 21, 1989) on Agreement No. 81217.89-3.

Cumulative Fees

Cumulative fees are \$29,813.45.

13928.42
12/21/89
WARZYN



WARZYN



January 18, 1990

Ms. Theresa A. Evanson
Wisconsin Department of Natural Resources
Environmental Response & Repair Section
Bureau of Solid Waste Management
101 South Webster Street, GEF II, SW/3
Madison, Wisconsin 53707

Re: Gas Monitoring Program and Community Relations Activities
Refuse Hideaway Landfill
Agreement No. 81217.89-3
Job 13928.70

Dear Ms. Evanson:

Enclosed are Warzyn's Monthly Progress Report, Invoice and completed WDNR form (Invoice for Professional Services, Request No. 3), for services and expenses regarding the gas monitoring and community relations activities for the Refuse Hideaway Landfill project.

If you have any questions, please call us immediately.

Sincerely,

WARZYN ENGINEERING INC.

Steven C. Termont-Schenk, P.E.
Administrative Manager

Joel V. Schittone, P.E.
Project Manager

STS/skb/JVS/TFL
[skb-111-95]

Enclosures: As Stated



MONTHLY PROJECT REPORT

WARZYN ENGINEERING INC. • ONE SCIENCE COURT • UNIVERSITY RESEARCH PARK • P.O. BOX 5385 • MADISON, WISCONSIN 53705

**Monthly Project Report - December 1989
Refuse Hideaway Landfill
Gas Monitoring and Community Relations
Agreement No. 81217.89-3**

Project Status:

Project work by Warzyn this month includes:

- Community Relations - A letter was sent to all parties on the mailing list advising them of the Technical Staff Availability Session to be held on December 19, 1990. Arrangements for holding the meeting in the West Middleton Elementary School facility were made.

Technical staff and support staff attended the availability session. Warzyn documented attendance and the questions which were asked.

Copies of correspondence and notification materials were distributed to the WDNR. The mailing list was updated from recipients and WDNR requests.

A media day was organized and conducted on-site at the Refuse Hideaway site on December 6. This coincided with installation of gas and leachate extraction and monitoring wells.

West Middleton Elementary School was contacted to determine whether the gymnasium was available for the February Public Meeting. We were notified that the gymnasium was not available. Therefore, the meeting will be held in the "Little Theatre", as was the previous public meeting.

Copies of the following documents were sent to the Middleton Public Library for public review:

- Engineering Design, Partial Gas and Leachate Extraction System
 - Health and Safety Plan, Partial Gas and Leachate Extraction System
 - Alternative Water Supply Report
 - Point-of-Entry Water Treatment Report/Applications
- Gas Monitoring - On December 5 a letter was submitted to the WDNR with proposed monitoring locations. These locations were approved by Sue Fisher.

The first round of monitoring was performed on December 7 and 8.

The Gas Monitoring Program was in final draft form and underwent internal reviews.

Difficulties Encountered

No difficulties were encountered in this period.

Difficulties Resolved

No difficulties required resolution.

Additional Scope Activities

There were no additional scope activities during this period.

Activities For Next Month

Activities expected to occur over the next month include:

- Warzyn and WDNR staff will hold a Technical Staff Availability Session at West Middleton Elementary School on January 24. Warzyn will prepare letters to notify interested groups of this session and to contact the media.
- The Gas Monitoring Program will be submitted to the WDNR. Gas monitoring work to continue during the month of January with two rounds of monitoring (minimum) to occur in accordance with the Gas Monitoring Program.

Key Personnel Changes

No changes of key personnel are anticipated.

Current Period Fees

Fees for the current period are \$13,661.18 (see invoice submitted January 18, 1990) on Agreement No. 81217.89-3.

Cumulative Fees

Cumulative fees are \$43,474.63.

STS/skb/JVS/TFL
[skb-601-56]
13928.70





EPF FILE
copy

January 18, 1990

Ms. Theresa A. Evanson
Wisconsin Department of Natural Resources
Environmental Response & Repair Section
Bureau of Solid Waste Management
101 South Webster Street, GEF II, SW/3
P.O. Box 7921
Madison, Wisconsin 53707

Re: Interim Remedial Measures
Refuse Hideaway Landfill
Agreement No. 81217.89-2
Job 13928.42

Dear Ms. Evanson:

Enclosed are Warzyn's Monthly Progress Report, Invoice and completed WDNR form (Invoice for Professional Services, Request No. 5), for services and expenses regarding the Refuse Hideaway Landfill Interim Remedial Measures.

If you have any questions regarding this invoice, please contact us immediately.

Sincerely,

WARZYN ENGINEERING INC.

A handwritten signature in black ink that reads "S.C.T.-S.S.k".

Steven C. Termont-Schenk, P.E.
Administrative Manager

A handwritten signature in blue ink that reads "Joel V. Schittone".

Joel V. Schittone, P.E.
Project Manager

STS/skb/JVS/TFL
[jlv-112-93]

Enclosures: As stated



MONTHLY PROJECT REPORT

WARZYN ENGINEERING INC. • ONE SCIENCE COURT • UNIVERSITY RESEARCH PARK • P.O. BOX 5385 • MADISON, WISCONSIN 53705

Monthly Project Report - December 1989 Refuse Hideaway Landfill Interim Remedial Measures Agreement No. 81217.89-2

Project Status:

Project work by Warzyn this month was on the following subtasks:

- Point-of-Entry Treatment Units - Liaise with WDNR and DILHR representatives responsible for review of our report entitled "Report and DILHR/WDNR Applications, Point-of-Entry Water Treatment" submitted in November. This report summarized our review of filtration technologies, pilot water filtration system results and presented plumbing applications.
- Alternative Water Supply - A report was submitted to the WDNR entitled, "Alternative Water Supply" which addressed the technical and administrative feasibility of providing permanent, alternative sources of potable water for the three affected residences.
- Sampling and Analysis of Residential Wells - In preparation for the second round of samples to be taken in January, a proforma letter and form authorizing Warzyn to sample the wells of forty-three private well owners identified by the WDNR were transmitted to the WDNR.
- Leachate Treatment Agreement - The results of the zinc, cyanide and nickel analysis of a leachate sample from newly completed extraction well GW2 were completed which indicated zinc concentrations in excess of MMSD pretreatment standards. There is some uncertainty regarding how representative this leachate sample was due to the limited depth of leachate in the well. This will be discussed with MMSD in January to determine what steps must be taken to obtain an agreement.
- Design of Partial Gas and Leachate Extraction System - The Partial Gas and Leachate Extraction System Engineering Design document was submitted to the WDNR during this period.
- Installation of Partial System - Activities which were performed include:
 - Direction of an on-site Health and Safety Meeting.
 - Execution of the subcontract agreement for partial system construction.

- Installation of three extraction wells and two monitoring wells.
- Waste characterization sampling and analyses.
- Installation of the gas header and leachate conveyance piping.
- Delivery and on-site pressure testing of the 25,000 gallon leachate holding tank.
- Miscellaneous construction activities.

Difficulties Encountered

Severe cold weather in December impeded construction activities.

Difficulties Resolved

Resolution included adjustment of construction schedules and methods.

Activities For next Month

Activities expected to occur over the next month include:

- Sampling and analysis of water samples from Spark-L-Pure point-of-entry treatment units. The scheduled sampling date is January 17, 1990.
- Sampling and analysis of residential wells is scheduled for January 15, 16 and 17, 1990.
- Report on progress of leachate treatment agreement or assist on completion of an agreement, as appropriate.
- Commence work on preparation of Phases II and III of the Interim Remedial Measures contract.
- Install leachate/condensate conveyance piping, leachate holding tank, blower station, flare station and construct other miscellaneous components of the partial gas and leachate extraction system.

Key Personnel Changes

No changes of key personnel are anticipated.

Current Period Fees

Fees for the current period are \$107,638.50 (see invoice submitted January 18, 1990).

Cumulative Fees

Cumulative fees are \$377,331.90

STS/skb/JVS/TFL
[skb-601-56a]
13928.42



WARZYN



ERT file

RECEIVED

FEB 26 1990

**BUREAU OF SOLID -
HAZARDOUS WASTE MANAGEMENT**

February 23, 1990

Ms. Theresa A. Evanson
Wisconsin Department of Natural Resources
Environmental Response & Repair Section
Bureau of Solid Waste Management
101 South Webster Street, GEF II, SW/3
P.O. Box 7921
Madison, Wisconsin 53707

Re: Interim Remedial Measures
Refuse Hideaway Landfill
Agreement No. 81217.89-2
Job 13928.48

Dear Ms. Evanson:

Enclosed are Warzyn's Monthly Progress Report, Invoice and completed WDNR form (Invoice for Professional Services, Request No. 6), for services and expenses regarding the Refuse Hideaway Landfill Interim Remedial Measures.

If you have any questions regarding this invoice, please contact us immediately.

Sincerely,

WARZYN ENGINEERING INC.

SCAT-Schenk
Steven C. Termont-Schenk, P.E.
Administrative Manager

Joel V. Schittone
Joel V. Schittone, P.E.
Project Manager

STS/skb/JVS/DFK
[dlk-102-85]

Enclosures: As stated

Warzyn Engineering Inc.
One Science Court
University Research Park
P.O. Box 5385
Madison, Wisconsin 53705
(608) 273-0440



MONTHLY PROJECT REPORT

WARZYN ENGINEERING INC. • ONE SCIENCE COURT • UNIVERSITY RESEARCH PARK • P.O. BOX 5385 • MADISON, WISCONSIN 53705

Monthly Project Report - January 1990
Refuse Hideaway Landfill
Interim Remedial Measures
Agreement No. 81217.89-2

Project Status:

Project work by Warzyn this month was on the following subtasks:

- Point-of-Entry Treatment Units - Liaison with WDNR and DILHR representatives responsible for review of the Warzyn report entitled "Report and DILHR/WDNR Applications, Point-of-Entry Water Treatment" submitted in November. This report summarized the review of filtration technologies, pilot water filtration system results and presented plumbing applications. Sampling and analysis of water samples from Spark-L-Pure point-of-entry treatment units was also performed. The sampling date was January 17, 1990. Additional samples were gathered and sent to General Ecology for analysis in their laboratory.
- Sampling and Analysis of Residential Wells - Sampling and analysis of residential wells within an approximate one-mile radius of the site was carried out on January 15, 16 and 17, 1990.
- Leachate Treatment Agreement - A letter addressed to the MMSD was prepared which reported on progress of leachate characterization efforts and outlined the steps necessary to complete the agreement. A draft of the letter was forwarded to the WDNR for review prior to submittal of the letter to MMSD.
- Installation of Partial System - Activities which were performed and documented by Warzyn include:
 - Installation of the leachate/condensate conveyance piping
 - Installation of the leachate/condensate holding tank
 - Installation of the blower station
 - Miscellaneous construction activities
- Phase II and III - Work began on the preparation of cost estimates for the groundwater characterization and monitoring associated with Phase II. The scope of work for Phase III, preparation of remedial options cost estimates, was more clearly defined in the meeting with the WDNR described below. An environmental engineer from Warzyn visited the site to evaluate grading, cover and drainage conditions.

A meeting with the WDNR was held at Warzyn's office on January 18, 1990 to discuss progress on a number of project subtasks and also the status of the budget. Warzyn sent notice that new 1990 billing rates will be effective as of the February 1990 billing period.

Difficulties Encountered

No difficulties were encountered in this period.

Difficulties Resolved

No difficulties required resolution.

Activities For next Month

Activities expected to occur over the next month include:

- Complete work on preparation of Phases II and III of the Interim Remedial Measures contract.
- Prepare a report summarizing the sampling and analysis of residential wells.
- Install the flare station, the piping between the blower and flare station and other miscellaneous components of the partial gas and leachate extraction system (partial system).
- Perform the partial system evaluation.
- Prepare the Operations and Maintenance (O&M) cost proposal for the partial system.
- Initiate the full gas and leachate extraction system design and engineering report.

Key Personnel Changes

No changes of key personnel are anticipated.

Current Period Fees

Fees for the current period are \$54,368.41 (see invoice submitted February 22, 1990).

Cumulative Fees

Cumulative fees are \$431,700.31

STS/skb/JVS/DFK
[dlk-102-85a]
13928.48



ERT file

February 23, 1990

Ms. Theresa A. Evanson
Wisconsin Department of Natural Resources
Environmental Response & Repair Section
Bureau of Solid Waste Management
101 South Webster Street, GEF II, SW/3
Madison, Wisconsin 53707

Re: Gas Monitoring Program and Community Relations Activities
Refuse Hideaway Landfill
Agreement No. 81217.89-3
Job 13928.70

Dear Ms. Evanson:

Enclosed are Warzyn's Monthly Progress Report, Invoice and completed WDNR form (Invoice for Professional Services, Request No. 4), for services and expenses regarding the gas monitoring and community relations activities for the Refuse Hideaway Landfill project.

If you have any questions, please call us immediately.

Sincerely,

WARZYN ENGINEERING INC.


Steven C. Termont-Schenk, P.E.
Administrative Manager


Joel V. Schittone, P.E.
Project Manager

STS/skb/JVS/DFK
[skb-111-95]

Enclosures: As Stated

Warzyn Engineering Inc.
One Science Court
University Research Park
P.O. Box 5385
Madison, Wisconsin 53705
(608) 273-0440



MONTHLY PROJECT REPORT

WARZYN ENGINEERING INC. • ONE SCIENCE COURT • UNIVERSITY RESEARCH PARK • P.O. BOX 5385 • MADISON, WISCONSIN 53705

Monthly Project Report - January 1990
Refuse Hideaway Landfill
Gas Monitoring and Community Relations
Agreement No. 81217.89-3

Project Status:

Project work by Warzyn this month includes:

- Community Relations - A letter was sent to all parties on the mailing list advising them of the Technical Staff Availability Session to be held on January 24, 1990. Arrangements for holding the meeting in the West Middleton Elementary School facility were made.

Technical staff and Community Relations staff attended the availability session. Warzyn documented attendance and the questions which were asked.

Copies of correspondence, press releases, and notification materials were distributed to the WDNR. The mailing list was updated from recipients, WDNR requests, and attendance cards from the above session.

- Gas Monitoring - On January 12, 1990 the Gas Monitoring Program was submitted to the WDNR. This document incorporated WDNR review comments received on January 11, 1990.

Routine gas monitoring was performed on January 4 and 17, 1990.

On January 24, 1990, Warzyn met with Exploration Technology Inc. (a drilling company) and Bill Summers at the Summers Tree Farm to field stake the location of proposed gas monitoring probe, GPW-1.

Difficulties Encountered

No difficulties were encountered in this period.

Difficulties Resolved

No difficulties required resolution.

Additional Scope Activities

There were no additional scope activities during this period.

Activities For Next Month

Activities expected to occur over the next month include:

- Warzyn and WDNR staff will hold a Public Officials Update and Public Meeting at West Middleton Elementary School on February 28. Warzyn will prepare letters to notify the names on the mailing list. A press release with cover letter will be prepared to notify the media. A separate letter will be prepared to notify the public officials.
- Two meetings will be held with the WDNR to discuss Fact Sheet content and Public Meeting Agenda planning, etc.
- A Fact Sheet will be written and distributed with Public Meeting notifications. These will also be available at the February 28th Public Meeting and a supply will be sent to the Middleton Public Library.
- Technical staff and Community Relations staff will attend the Public Meeting. Warzyn will perform a presentation, prepare presentation materials (boards, slides, etc.) and document attendance and the questions asked at the Public Meeting.
- Copies of correspondence, press releases, and notification materials will be distributed to the WDNR.
- Mailing list will be updated after public meeting.
- Gas monitoring activities will continue in accordance with the Gas Monitoring Program.
- Gas monitoring probes routinely monitored will be retrofitted to include shut-off valves and hose barbs to provide more accurate and efficient gas monitoring.
- Gas Monitoring Probe GPW-1 will be installed at the Summer's Tree Farm property.

Key Personnel Changes

No changes of key personnel are anticipated.

Current Period Fees

Fees for the current period are \$6,139.68 (see invoice submitted February 22, 1990) on Agreement No. 81217.89-3.

Cumulative Fees

Cumulative fees are \$49,614.31.

WARZYN



File

RECEIVED

MAR 26 1990

BUREAU OF SOLID -
HAZARDOUS WASTE MANAGEMENT

March 23, 1990

Ms. Theresa A. Evanson
Wisconsin Department of Natural Resources
Environmental Response & Repair Section
Bureau of Solid Waste Management
101 South Webster Street, GEF II, SW/3
Madison, Wisconsin 53707

Re: Gas Monitoring Program and Community Relations Activities
Refuse Hideaway Landfill
Agreement No. 81217.89-3
Job 13928.70

Dear Ms. Evanson:

Enclosed are Warzyn's Monthly Progress Report, Invoice and completed WDNR form (Invoice for Professional Services, Request No. 5), for services and expenses regarding the gas monitoring and community relations activities for the Refuse Hideaway Landfill project.

If you have any questions, please call us immediately.

Sincerely,

WARZYN ENGINEERING INC.

Steven C. Termont-Schenk, P.E.
Administrative Manager

Joel V. Schittone, P.E.
Project Manager

STS/skb/JVS/TFL
[dlk-103-86]
13928.48

Enclosures: As Stated



MONTHLY PROJECT REPORT

WARZYN ENGINEERING INC. • ONE SCIENCE COURT • UNIVERSITY RESEARCH PARK • P.O. BOX 5385 • MADISON, WISCONSIN 53705

Monthly Project Report - February 1990
Refuse Hideaway Landfill
Gas Monitoring and Community Relations
Agreement No. 81217.89-3

Project Status:

Project work by Warzyn this month includes:

- Community Relations - A letter was sent to all parties on the mailing list advising them of the public meeting on February 28, 1990. A separate letter was prepared and sent to the public officials. Arrangements for holding the meeting in the West Middleton Elementary School facility were made.

Two meetings were held with the WDNR to discuss Fact Sheet content and the public meeting agenda.

A Fact Sheet was written and distributed with the public meeting notification. These were available at the February 28 public meeting and a supply was sent to the Middleton Public Library to be included in the public information repository.

Technical staff and Community Relations staff attended the February 28 public officials update meeting and the public meeting. Warzyn gave a presentation, including graphic materials (boards, slides, etc.), and documented attendance and the questions asked at the meetings.

Copies of correspondence, press releases, and notification materials were sent to the WDNR. The mailing list was updated from attendees at the meetings, WDNR requests and attendance cards from the above meeting.

- Gas Monitoring - Routine gas monitoring was performed on February 5 and 21, 1990.

A survey level circuit was performed by Warzyn from the Summers residence to the field location of gas monitoring probe GPW-1.

A gas monitoring probe, GPW-1 was installed at the Summers Tree Farm by Exploration Technology Inc. on February 9, 1990.

Gas monitoring probes routinely monitored were retrofitted to include shut-off valves and hose barbs to provide more accurate and efficient gas monitoring.

Difficulties Encountered

No difficulties were encountered in this period.

Difficulties Resolved

No difficulties required resolution.

Activities For Next Month

Activities expected to occur over the next month include:

- A project summary letter will include attendance cards, surplus copies of both Fact Sheets, phone logs, media coverage and a brief summary.
- Copies of correspondence, press releases, and notification materials for the February Public Meeting will be distributed to the WDNR.
- Mailing list will be updated after the Public Meeting - a hard copy and mailing label ASCII disk will be distributed to the WDNR with the project summary letter.
- Gas monitoring activities will continue in accordance with the Gas Monitoring Program.
- Submit a work order in April for additional costs incurred on this contract due to 1990 rate increases and professional services in excess of those originally budgeted.

Key Personnel Changes

No changes of key personnel are anticipated.

Current Period Fees

Fees for the current period are \$16,024.34 (see invoice submitted March 23, 1990) on Agreement No. 81217.89-3.

Cumulative Fees

Cumulative fees are \$65,638.65.

STS/skb/JVS/TFL
[dlk-103-86a]
13928.48

File

WARZYN



RECEIVED

MAR 26 1990

**BUREAU OF SOLID -
HAZARDOUS WASTE MANAGEMENT**

March 23, 1990

Ms. Theresa A. Evanson
Wisconsin Department of Natural Resources
Environmental Response & Repair Section
Bureau of Solid Waste Management
101 South Webster Street, GEF II, SW/3
P.O. Box 7921
Madison, Wisconsin 53707

Re: Interim Remedial Measures
Refuse Hideaway Landfill
Agreement No. 81217.89-2
Job 13928.48

Dear Ms. Evanson:

Enclosed are Warzyn's Monthly Progress Report, Invoice and completed WDNR form (Invoice for Professional Services, Request No. 7), for services and expenses regarding the Refuse Hideaway Landfill Interim Remedial Measures.

If you have any questions regarding this invoice, please contact us immediately.

Sincerely,

WARZYN ENGINEERING INC.

Steven C. Termont-Schenk, P.E.
Administrative Manager

Joel V. Schittone, P.E.
Project Manager

STS/skb/JVS/TFL
[dlk-103-87]
13928.48

Enclosures: As stated

Warzyn Engineering Inc.
One Science Court
University Research Park
P.O. Box 5385
Madison, Wisconsin 53705
(608) 273-0440



MONTHLY PROJECT REPORT

WARZYN ENGINEERING INC. • ONE SCIENCE COURT • UNIVERSITY RESEARCH PARK • P.O. BOX 5385 • MADISON, WISCONSIN 53705

Monthly Project Report - February 1990 Refuse Hideaway Landfill Interim Remedial Measures Agreement No. 81217.89-2

Project Status:

Project work by Warzyn this month was on the following subtasks:

- Point-of-Entry Treatment Units - Approvals from WDNR and DILHR representatives responsible for review of the November 1989 Warzyn report entitled "Report and DILHR/WDNR Applications, Point-of-Entry Water Treatment" were received this period. This report summarized the review of filtration technologies, pilot water filtration system results and presented plumbing applications.
- Sampling and Analysis of Residential Wells - Results from the January 15, 16 and 17, 1990 sampling and analysis of residential wells within an approximate one-mile radius of the site were transmitted to the WDNR. Following a reanalysis of the Thew residence, the final report for this subtask was submitted to the WDNR.
- Leachate Treatment Agreement - Liaison with MMSD to effect their preparation of a leachate treatment agreement. There was some concern expressed by the MMSD regarding acceptance of leachate from outside the district's boundaries. This issue is not an insurmountable problem and should be resolved in March.
- Installation of Partial System - Activities which were performed and documented by Warzyn include:
 - Installation of the piping between blower and flare stations
 - Installation of the flare station
 - Miscellaneous construction activities
- The Operation and Maintenance (O&M) cost proposal for the partial system was initiated.
- Phase II and III - Working drafts of cost estimates for groundwater characterization and monitoring (Phase II) and remedial options (Phase III) were prepared.

Difficulties Encountered

No difficulties were encountered in this period.

Difficulties Resolved

No difficulties required resolution.

Activities For next Month

Activities expected to occur over the next month include:

- Continue preparation of Phases II and III of the Interim Remedial Measures contract.
- Install the flare station shroud and perform the partial system evaluation.
- Continue preparation of the Operations and Maintenance (O&M) cost proposal for the partial system.
- Initiate preparation of the full gas and leachate extraction system design and engineering report.
- Submit a work order in April for 1990 rate increases, additional contingency and recently identified tasks to be performed by Warzyn under the terms of this existing contract.

Key Personnel Changes

No changes of key personnel are anticipated.

Current Period Fees

Fees for the current period are \$46,755.81 (see invoice submitted March 23, 1990).

Cumulative Fees

Cumulative fees are \$478,456.12.

STS/skb/JVS/TFL
[dlk-103-87a]
13928.48

WARZYN



file

May 3, 1990

Ms. Theresa A. Evanson
Wisconsin Department of Natural Resources
Environmental Response & Repair Section
Bureau of Solid Waste Management
101 South Webster Street, GEF II, SW/3
P.O. Box 7921
Madison, Wisconsin 53707

RECEIVED
MAY 07 1990
BUREAU OF SOLID -
HAZARDOUS WASTE MANAGEMENT

Re: March 1990 Invoice
Interim Remedial Measures
Refuse Hideaway Landfill
Agreement No. 81217.89-2
Job 13928.48

Dear Ms. Evanson:

Enclosed are Warzyn's Monthly Progress Report, Invoice and completed WDNR form (Invoice for Professional Services, Request No. 8), for services and expenses regarding the Refuse Hideaway Landfill Interim Remedial Measures.

If you have any questions regarding this invoice, please contact us immediately.

Sincerely,

WARZYN ENGINEERING INC.

Steven C. Termont / ps

Steven C. Termont-Schenk, P.E.
Administrative Manager

Joel V. Schittone

Joel V. Schittone, P.E.
Project Manager

[Triplicate]
STS/jkk/JVS/TFL
[wpmisc-104-90]
13928.48

Enclosures: As stated

MONTHLY PROJECT REPORT - MARCH 1990
REFUSE HIDEAWAY LANDFILL
INTERIM REMEDIAL MEASURES
AGREEMENT NO. 81217.89-2

PROJECT STATUS:

Project work by Warzyn this month was on the following subtasks:

- Point-of-Entry Treatment Units - DILHR Plumbing Plan Applications were prepared and ancillary system components were assessed to provide adequate pressure and treatment for the Stoppleworth and Schultz residences.
- Residential Well Sampling/Analysis - Submitted to WDNR Summary Report entitled "Sampling and Analysis of Residential Wells."
- Leachate Treatment Agreement - Liaised with MMSD regarding the draft leachate treatment agreement received on March 9, 1990. The MMSD sent a letter to Warzyn on March 28, 1990 requesting that a definitive statement be obtained from the WDNR and U.S. EPA regarding whether the MMSD would be considered a RCRA Reporting Facility by accepting leachate from a potential NPL site.
- Installation of Partial Extraction System - Activities which were performed and documented by Warzyn include:
 - Installed flare shroud
 - Work proceeded on electrical system for flare
 - Commenced partial system evaluation
 - Miscellaneous construction activities
- Construction Documentation - Continued preparation of Construction Observation Report for partial extraction system.
- Preparation of the Operation and Maintenance (O&M) cost proposal for the partial system continued.
- Continued work on the full system design.
- Phase II - The cost estimate for groundwater characterization and monitoring (Phase II) was submitted to WDNR. Upon direction by Ms. Terry Evanson, a Monitoring Well Location Plan and a revised soil boring summary table were prepared and submitted to the WDNR for use in the proposed RFP (additional scope activity).
- Phase III - Continued preparation of Remedial Options Plan cost estimate.

DIFFICULTIES ENCOUNTERED

No difficulties were encountered in this period.

DIFFICULTIES RESOLVED

No difficulties required resolution.

ACTIVITIES FOR NEXT MONTH

Activities expected to occur over the next month include:

- Continue preparation of Phase III of the Interim Remedial Measures contract.
- Continue partial system evaluation.
- Continue preparation of the Operations and Maintenance (O&M) cost proposal for the partial system.
- Continue preparation of the full gas and leachate extraction system design and engineering report.
- Continue preparation of the construction observation report for the partial extraction system.

KEY PERSONNEL CHANGES

None.

ADDITIONAL SCOPE ACTIVITIES

A work order will be prepared in April to address additional costs due to the 1990 rate increase, professional services performed beyond those included in the current Scope of Work and additional services requested by the WDNR.

CURRENT PERIOD FEES

Fees for the current period are \$58,480.10 (see invoice submitted, May 3, 1990) under Agreement No. 81217.89-2.

CUMULATIVE FEES

Cumulative fees are \$536,936.22.

STS/jkk/JVS/TFL
[wpmisc-104-89]
13928.48-MD

WARZYN



file

May 3, 1990

Ms. Theresa A. Evanson
Wisconsin Department of Natural Resources
Environmental Response & Repair Section
Bureau of Solid Waste Management
101 South Webster Street, GEF II, SW/3
Madison, Wisconsin 53707

RECEIVED
MAY 07 1990
BUREAU OF SOLID
HAZARDOUS WASTE MANAGEMENT

Re: March 1990 Invoice
Gas Monitoring Program and Community Relations Activities
Refuse Hideaway Landfill
Agreement No. 81217.89-3
Job 13928.87

Dear Ms. Evanson:

Enclosed are Warzyn's Monthly Progress Report, Invoice and completed WDNR form (Invoice for Professional Services, Request No. 6), for services and expenses regarding the gas monitoring and community relations activities for the Refuse Hideaway Landfill project.

If you have any questions, please call us immediately.

Sincerely,

WARZYN ENGINEERING INC.

Steven C. Termont/Schen

Steven C. Termont-Schenk, P.E.
Administrative Manager

Joel V. Schittone

Joel V. Schittone, P.E.
Project Manager

[Triplicate]
STS/jkk/JVS/TFL
[wptemp-104-67]
13928.48

Enclosures: As Stated

**MONTHLY PROJECT REPORT - MARCH 1990
REFUSE HIDEAWAY LANDFILL
GAS MONITORING AND COMMUNITY RELATIONS
AGREEMENT NO. 81217.89-3**

PROJECT STATUS:

Project work by Warzyn this month includes:

- Community Relations - Initiated preparation of Community Relations Activities Summary Report.

Copies of correspondence, press releases, and notification materials announcing the February Public Meeting were distributed to the WDNR.

The mailing list was updated after the February Public Meeting.

Work progressed on concluding the Community Relations Program. (See activities for next month)

- Gas Monitoring - Routine gas monitoring was performed on March 8 and 23, 1990.
Administrative activities associated with gas monitoring program.

DIFFICULTIES ENCOUNTERED

No difficulties were encountered in this period.

DIFFICULTIES RESOLVED

No difficulties required resolution.

ACTIVITIES FOR NEXT MONTH

Activities expected to occur next month include:

- A Community Relations Activities Summary Report will be distributed to the WDNR. This package will include:
 1. Hard copy of mailing list
 2. Resource list
 3. Mailing label ASCII disk
 4. Completed attendance cards
 5. Surplus copies of attendance cards and Fact Sheets
 6. Phone logs and press releases.
- Gas monitoring activities will continue in accordance with the Gas Monitoring Program.

KEY PERSONNEL CHANGES

No changes of key personnel are anticipated.

ADDITIONAL SCOPE ACTIVITIES

Project costs have exceeded the current contract cost estimate. A work order will be prepared in May to address the additional costs incurred due to the 1990 rate increase and professional services performed beyond those included in the original Scope of Work.

CURRENT PERIOD FEES

Fees for the current period are \$4,877.30 (see invoice submitted May 3, 1990) under Agreement No. 81217.89-3.

CUMULATIVE FEES

Cumulative fees are \$70,515.95.

STS/jkk/JVS/TFL
[wptemp-104-67a]
13928.48-MD

WARZYN



File

May 16, 1990

Ms. Theresa A. Evanson
Wisconsin Department of Natural Resources
Environmental Response & Repair Section
Bureau of Solid Waste Management
101 South Webster Street, GEF II, SW/3
P.O. Box 7921
Madison, Wisconsin 53707

RECEIVED
MAY 18 1990
BUREAU OF SOLID -
HAZARDOUS WASTE MANAGEMENT

Re: April 1990 Invoice
Interim Remedial Measures
Refuse Hideaway Landfill
Agreement No. 81217.89-2
Job 13928.48

Dear Ms. Evanson:

Enclosed are Warzyn's Monthly Progress Report, Invoice and completed WDNR form (Invoice for Professional Services, Request No. 9), for services and expenses regarding the Refuse Hideaway Landfill Interim Remedial Measures.

If you have any questions regarding this invoice, please contact us immediately.

Sincerely,

WARZYN ENGINEERING INC.

Jan C. Kucher, P.E.
Project Engineer

Joel V. Schittone, P.E.
Project Manager

[Triplicate]
JCK/vbl/JVS/DFK
[wptemp-105-58]
13928.48

Enclosures: As stated

**MONTHLY PROJECT REPORT - APRIL 1990
REFUSE HIDEAWAY LANDFILL
INTERIM REMEDIAL MEASURES
AGREEMENT NO. 81217.89-2**

Project Status:

Project work by Warzyn this month was on the following subtasks:

- Point-of-Entry Treatment Units - DILHR General Plumbing Plan Approvals were received and ancillary system components were assessed to provide adequate pressure and treatment for the Stopplesworth residence. Quotes were received to modify the well and pump at the Schultz residence to meet applicable codes and to provide satisfactory service with the new treatment units. The POE treatment unit was installed at the Stopplesworth residence on April 23, 1990.
- Leachate Treatment Agreement - Warzyn sent a letter to MMSD on March 29, 1990 regarding MMSD's request for a definitive statement from the WDNR and U.S. EPA regarding whether the MMSD would be considered a RCRA Reporting Facility by accepting leachate from a potential NPL site. WDNR is preparing a response to MMSD's March 28 letter.
- Installation of Partial Extraction System - Activities which were performed and documented by Warzyn include:
 - Completed field work associated with partial system evaluation
 - Miscellaneous construction activities
 - System start-up tests performed on April 18, 1990
 - Interim system operation started April 19, 1990
 - Electrical work associated with the holding tank continued.
- Work on Operation and Maintenance (O&M) cost proposal for the partial system continued.
- Site grading, access road and fencing was completed.
- Chain link enclosures were installed around the two extraction well heads.
- Construction Documentation - Continued preparation of Construction Observation Report for the partial extraction system.
- Phase III - Continued preparation of Remedial Options Plan cost estimate.

Difficulties Encountered

No difficulties were encountered in this period.

Difficulties Resolved

No difficulties required resolution.



Activities for Next Month

Activities expected to occur over the next month include:

- Monitor POE treatment unit at Stoppleworth residence.
- Install POE treatment unit, new well pump and pressure tank at Schultz residence.
- Continue preparation of Phase III of the Interim Remedial Measures contract.
- Continue preparation of the Operations and Maintenance (O&M) cost proposal for the partial system.
- Liaise with WDNR regarding status of leachate treatment agreement.
- Begin preparation of Construction Contract Documents (see Additional Scope Activities below).
- Continue preparation of the full gas and leachate extraction system design and engineering report.
- Continue preparation of the Construction Observation Report for the partial extraction system.

Key Personnel Changes

Jan Kucher will assume Project Engineer responsibilities for the remainder of the project.

Current Period Fees

Fees for the current period are \$48,002.81 (see invoice submitted, April 1990) under Agreement No. 81217.89-2.

Cumulative Fees

Cumulative fees are \$584,939.03.

Additional Scope Activities

Warzyn submitted draft Work Order No. 5 to the WDNR on April 11, 1990. On April 19, 1990 WDNR and Warzyn personnel met to discuss the draft Work Order. On April 30, 1990 Work Order No. 5 was submitted to the WDNR.

On April 30, 1990 Work Order No. 6 was submitted to the WDNR. Work Order No. 6 addressed authorization to proceed with preparation of Construction Contract Documents. Work Order No. 6 was executed by the WDNR on May 1, 1990.

JCK/vbl/JVS/DFK
[wptemp-105-58a]
13928.48





File

RECEIVED
MAY 18 1990
BUREAU OF SOLID -
HAZARDOUS WASTE MANAGEMENT

May 16, 1990

Ms. Theresa A. Evanson
Wisconsin Department of Natural Resources
Environmental Response & Repair Section
Bureau of Solid Waste Management
101 South Webster Street, GEF II, SW/3
Madison, Wisconsin 53707

Re: April 1990 Invoice
Gas Monitoring Program and Community Relations Activities
Refuse Hideaway Landfill
Agreement No. 81217.89-3
Job 13928.70

Dear Ms. Evanson:

Enclosed are Warzyn's Monthly Progress Report, Invoice and completed WDNR form (Invoice for Professional Services, Request No. 7), for services and expenses regarding the gas monitoring and community relations activities for the Refuse Hideaway Landfill project.

If you have any questions, please call us immediately.

Sincerely,

WARZYN ENGINEERING INC.

A handwritten signature in black ink that reads "Jan C. Kucher".

Jan C. Kucher, P.E.
Project Engineer

A handwritten signature in blue ink that reads "Joel V. Schittone".

Joel V. Schittone, P.E.
Project Manager

[Triplicate]
JCK/vbl/JVS/DFK
[wptemp-105-57]
13928.48

Enclosures: As Stated

MONTHLY PROJECT REPORT - APRIL 1990
REFUSE HIDEAWAY LANDFILL
GAS MONITORING AND COMMUNITY RELATIONS
AGREEMENT NO. 81217.89-3

Project Status:

Project work by Warzyn this month includes:

- Community Relations - Completed Community Relations Activities Summary Report (submitted on May 1, 1990).
- Gas Monitoring - Routine gas monitoring was performed on April 11, 13 and 26, 1990.

Quarterly Report was drafted.

Difficulties Encountered

No difficulties were encountered in this period.

Difficulties Resolved

No difficulties required resolution.

Activities for Next Month

Activities expected to occur next month include:

- Gas monitoring activities will continue in accordance with the Gas Monitoring Program.

Key Personnel Changes

Jan Kucher will assume Project Engineer responsibilities for the remainder of the project.

Additional Scope Activities

Project costs have exceeded the current contract cost estimate. A work order will be prepared in May to address the additional costs incurred due to the 1990 rate increase and professional services performed beyond those included in the original Scope of Work.

Current Period Fees

Fees for the current period are \$3,440.85 (see invoice submitted, April 1990) under Agreement No. 81217.89-3.

Cumulative Fees

Cumulative fees are \$73,956.80.



file

June 7, 1990

Ms. Theresa A. Evanson
Wisconsin Department of Natural Resources
Environmental Response & Repair Section
Bureau of Solid Waste Management
101 South Webster Street, GEF II, SW/3
P.O. Box 7921
Madison, Wisconsin 53707

RECEIVED
JUN 11 1990
BUREAU OF SOLID -
HAZARDOUS WASTE MANAGEMENT

Re: May 1990 Invoice
Interim Remedial Measures
Refuse Hideaway Landfill
Agreement No. 81217.89-2
Job 13928.48

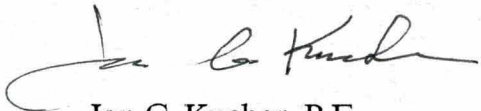
Dear Ms. Evanson:

Enclosed are Warzyn's Monthly Progress Report, Invoice and completed WDNR form (Invoice for Professional Services, Request No. 10), for services and expenses regarding the Refuse Hideaway Landfill Interim Remedial Measures.

If you have any questions regarding this invoice, please contact us immediately.

Sincerely,

WARZYN ENGINEERING INC.



Jan C. Kucher, P.E.
Project Engineer



Joel V. Schittone, P.E.
Project Manager

[Triplicate]
JCK/vbl/JVS/TFL
[wptemp-106-86]
13928.48

Enclosures: As stated





MONTHLY PROJECT REPORT

WARZYN ENGINEERING INC. • ONE SCIENCE COURT • UNIVERSITY RESEARCH PARK • P.O. BOX 5385 • MADISON, WISCONSIN 53705

MONTHLY PROJECT REPORT - MAY 1990 REFUSE HIDEAWAY LANDFILL INTERIM REMEDIAL MEASURES AGREEMENT NO. 81217.89-2

Project Status:

Project work by Warzyn this month was on the following subtasks:

- Point-of-Entry Treatment Units - Schultz residence treatment system was installed and well and pump upgrades were completed.
- Monitoring of P.O.E. treatment units at Stoppeworth residence was performed.
- Leachate Treatment Agreement - WDNR prepared a response to MMSD's letter on May 23, 1990. WDNR instructed Warzyn that WDNR will now take the lead on the leachate treatment agreement.
- Installation of Partial Extraction System - Activities which were performed and documented by Warzyn include:
 - Miscellaneous construction activities
 - Interim system operation continued, with system checks performed on May 1, 3, 7, 11, 16, 18, 23, 25 and 30, 1990.
 - Electrical work associated with the holding tank continued.
- Construction Documentation - Continued preparation of Construction Observation Report for the partial extraction system.
- Work continued on the design of the full gas and leachate extraction system and engineering report.
- Work began on the preparation of Construction Contract Documents.
- Warzyn met with WDNR and DOA staff on May 22, 1990 to discuss Construction Contract Documents and Generic Specifications.

Difficulties Encountered

No difficulties were encountered in this period.

Difficulties Resolved

No difficulties required resolution.

Activities for Next Month

Activities expected to occur over the next month include:

- Monitor POE treatment unit at Stoppeworth and Schultz residences.
- Continue preparation of Construction Contract Documents and Generic Specifications.
- Continue preparation of the full gas and leachate extraction system design and engineering report.
- Continue preparation of the Construction Observation Report for the partial extraction system.

Key Personnel Changes

None.

Current Period Fees

Fees for the current period are \$51,152.28 (see invoice submitted, May 1990) under Agreement No. 81217.89-2.

Cumulative Fees

Cumulative fees are \$636,091.31.

Special Considerations

During our May 22, 1990 meeting, the following issues were discussed and agreed upon by Warzyn and Terry Evanson, Sally Kefer and Celia Vanderloop:

- The gas monitoring summary report will be submitted at the end of the year rather than issuing quarterly reports;
- Priority has been given to preparation of the final gas and leachate extraction system design and the construction contract documents. Therefore, submittal of the partial system construction observation report and Phase III cost estimate have been given a secondary priority, temporarily postponing submittal;
- The operation and maintenance (O&M) cost estimate presented in Work Order No. 5 meets the requirements for submittal of the O&M cost proposal for the partial system.

Additional Scope Activities

Work Order No. 5 was executed by the Governor on May 21, 1990.

Work Order No. 6, addressing authorization to proceed with preparation of Construction Contract Documents, was executed by WDNR on May 1, 1990.

An additional cost was incurred due to changed field conditions for removal of a 20 in. thick concrete slab at the Schultz well head (\$634.00).

JCK/vbl/JVS/TFL
[wptemp-601-79]
13928.48

WARZYN

June 7, 1990

Ms. Theresa A. Evanson
Wisconsin Department of Natural Resources
Environmental Response & Repair Section
Bureau of Solid Waste Management
101 South Webster Street, GEF II, SW/3
Madison, Wisconsin 53707

RECEIVED
JUN 11 1990
BUREAU OF SOLID WASTE
HAZARDOUS WASTE MANAGEMENT

Re: May 1990 Invoice
Gas Monitoring Program and Community Relations Activities
Refuse Hideaway Landfill
Agreement No. 81217.89-3
Job 13928.87

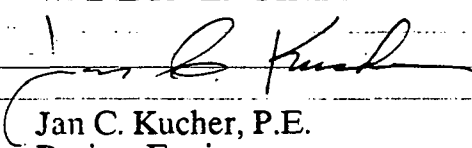
Dear Ms. Evanson:

Enclosed are Warzyn's Monthly Progress Report, Invoice and completed WDNR form (Invoice for Professional Services, Request No. 8), for services and expenses regarding the gas monitoring and community relations activities for the Refuse Hideaway Landfill project.

If you have any questions, please call us immediately.

Sincerely,

WARZYN ENGINEERING INC.


Jan C. Kucher, P.E.
Project Engineer


Joel V. Schittone, P.E.
Project Manager

[TriPLICATE]
JCK/vbl/JVS/TFL
[wptemp-106-85]
13928.48

Enclosures: As Stated

THE PERFECT BALANCE
BETWEEN TECHNOLOGY
AND CREATIVITY

MADISON
ONE SCIENCE COURT
P.O. BOX 5385
MADISON, WI 53705
(608) 251-4747
FAX (608) 273 2513



MONTHLY PROJECT REPORT

WARZYN ENGINEERING INC. • ONE SCIENCE COURT • UNIVERSITY RESEARCH PARK • P.O. BOX 5385 • MADISON, WISCONSIN 53705

MONTHLY PROJECT REPORT - MAY 1990 REFUSE HIDEAWAY LANDFILL GAS MONITORING AND COMMUNITY RELATIONS AGREEMENT NO. 81217.89-3

Project Status:

Project work by Warzyn this month includes:

- Community Relations - Completed Community Relations Activities Summary Report (submitted on May 1, 1990).
- Gas Monitoring - Routine gas monitoring was performed on May 1 and 18, 1990.

Difficulties Encountered

No difficulties were encountered in this period.

Difficulties Resolved

No difficulties required resolution.

Activities for Next Month

Activities expected to occur next month include:

- Gas monitoring activities will continue in accordance with the Gas Monitoring Program.

Key Personnel Changes

None.

Additional Scope Activities

Project costs have exceeded the current contract cost estimate. A work order will be prepared in June to address the additional costs incurred due to the 1990 rate increase and professional services performed beyond those included in the original Scope of Work.

Current Period Fees

Fees for the current period are \$961.94 (see invoice submitted, May 1990) under Agreement No. 81217.89-3.

Cumulative Fees

Cumulative fees are \$74,918.74.

Special Considerations

Warzyn's obligation regarding community relations activities has been fulfilled with submittal of the Summary Report.

JCK/vbl/JVS/TFL
[wptemp-601-78]
13928.48



file

RECEIVED

JUL 17 1990

BUREAU OF SOLID -
HAZARDOUS WASTE MANAGEMENT

July 13, 1990

Ms. Theresa A. Evanson
Wisconsin Department of Natural Resources
Environmental Response & Repair Section
Bureau of Solid Waste Management
101 South Webster Street, GEF II, SW/3
Madison, Wisconsin 53707

Re: June 1990 Invoice
Gas Monitoring Program and Community Relations Activities
Refuse Hideaway Landfill
Agreement No. 81217.89-3
Job 13928.87

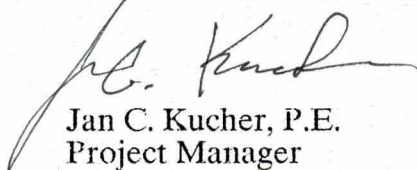
Dear Ms. Evanson:

Enclosed are Warzyn's Monthly Progress Report, Invoice and completed WDNR form (Invoice for Professional Services, Request No. 9), for services and expenses regarding the gas monitoring and community relations activities for the Refuse Hideaway Landfill project.

If you have any questions, please contact us.

Sincerely,

WARZYN ENGINEERING INC.



Jan C. Kucher, P.E.
Project Manager

[Triplicate]
JCK/sss
[sss-107-86]
13928.48

Enclosures: As Stated

THE PERFECT BALANCE
BETWEEN TECHNOLOGY
AND CREATIVITY.

MADISON
ONE SCIENCE COURT
P.O. BOX 5385
MADISON, WI 53705
(608) 231-4747
FAX (608) 273-2513



**MONTHLY PROJECT REPORT - JUNE 1990
REFUSE HIDEAWAY LANDFILL
GAS MONITORING AND COMMUNITY RELATIONS
AGREEMENT NO. 81217.89-3**

Project Status:

Project work by Warzyn this month includes:

- Gas Monitoring - Routine gas monitoring was performed on June 15, 1990.

Difficulties Encountered

No difficulties were encountered in this period.

Difficulties Resolved

No difficulties required resolution.

Activities for Next Month

Activities expected to occur next month include:

- Gas monitoring activities will continue in accordance with the Gas Monitoring Program.

Key Personnel Changes

Jan Kucher assumed project management responsibilities. Joel Schittone will continue project involvement in a technical resource/quality assurance capacity.

Additional Scope Activities

Project costs regarding community relations activities have exceeded the current contract cost estimate. A work order will be prepared in July to address the additional costs incurred due to the 1990 rate increase and professional services performed beyond those included in the original Scope of Work.

Current Period Fees

Fees for the current period are \$277.15 (see invoice submitted, June 1990) under Agreement No. 81217.89-3.

Cumulative Fees

Cumulative fees are \$75,195.89.

JCK/dlk/JVS/TFL
[sss-107-85]
13928.48-MD



file

July 13, 1990

Ms. Theresa A. Evanson
Wisconsin Department of Natural Resources
Environmental Response & Repair Section
Bureau of Solid Waste Management
101 South Webster Street, GEF II, SW/3
P.O. Box 7921
Madison, Wisconsin 53707

RECEIVED
JUL 17 1990
BUREAU OF SOLID -
HAZARDOUS WASTE MANAGEMENT

Re: June 1990 Invoice
Interim Remedial Measures
Refuse Hideaway Landfill
Agreement No. 81217.89-2
Job 13928.48

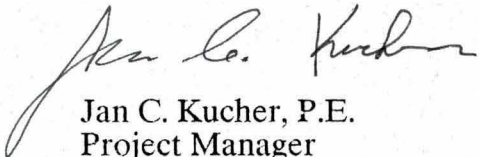
Dear Ms. Evanson:

Enclosed are Warzyn's Monthly Progress Report, Invoice and completed WDNR form (Invoice for Professional Services, Request No. 11), for services and expenses regarding the Refuse Hideaway Landfill Interim Remedial Measures.

If you have any questions please contact us.

Sincerely,

WARZYN ENGINEERING INC.



Jan C. Kucher, P.E.
Project Manager

[Triplicate]
JCK/dlk/JCK
[sss-107-88]
13928.48

Enclosures: As stated

THE PERFECT BALANCE
BETWEEN TECHNOLOGY
AND CREATIVITY.

MADISON
ONE SCIENCE COURT
P.O. BOX 5385
MADISON, WI 53705
(608) 231-4747
FAX (608) 273-2513



MONTHLY PROJECT REPORT - JUNE 1990
REFUSE HIDEAWAY LANDFILL
INTERIM REMEDIAL MEASURES
AGREEMENT NO. 81217.89-2

Project Status:

Project work by Warzyn this month was on the following subtasks:

- Monitoring of P.O.E. treatment units was performed at Stoppleworth and Schultz residence.
- Installation of Partial Extraction System - Activities which were performed and documented by Warzyn include:
 - Miscellaneous construction activities
 - Interim system operation continued, with system checks performed on June 1, 8, 15, 20, and 27, 1990.
 - Electrical work associated with leachate the holding tank monitoring equipment continued.
- Construction Documentation - Continued preparation of Construction Observation Report for the partial extraction system.
- Work continued on the design of the full gas and leachate extraction system and engineering report.
- Work continued on preparation of Construction Contract Documents.

Difficulties Encountered

No difficulties were encountered in this period.

Difficulties Resolved

No difficulties required resolution.

Activities for Next Month

Activities expected to occur over the next month include:

- Monitor POE treatment unit at Stoppleworth and Schultz residences.
- Continue preparation of Construction Contract Documents and Generic Specifications.

- Continue preparation of the full gas and leachate extraction system design and engineering report.
- Continue preparation of the Construction Observation Report for the partial extraction system.

Key Personnel Changes

Jan Kucher assumed project management responsibilities. Joel Schittone will continue project involvement in a technical resource/quality assurance capacity.

Current Period Fees

Fees for the current period are \$70,379.75 (see invoice submitted, June 1990) under Agreement No. 81217.89-2.

Cumulative Fees

Cumulative fees are \$706,471.06.

Special Considerations

None.

Additional Scope Activities

Construction Contract Document progress was delayed approximately one week due to ground flare criteria revisions in the current draft of NR 445.

JCK/dlk/JVS/TFL
[sss-107-87]
13928.48-MD

August 17, 1990

Ms. Theresa A. Evanson
Wisconsin Department of Natural Resources
Environmental Response & Repair Section
Bureau of Solid Waste Management
101 South Webster Street, GEF II, SW/3
Madison, Wisconsin 53707

Re: July 1990 Invoice
Gas Monitoring Program and Community Relations Activities
Refuse Hideaway Landfill
Agreement No. 81217.89-3
Job 13928.87

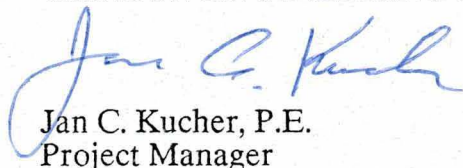
Dear Ms. Evanson:

Enclosed are Warzyn's Monthly Progress Report, Invoice and completed WDNR form (Invoice for Professional Services, Request No. 10), for services and expenses regarding the gas monitoring and community relations activities for the Refuse Hideaway Landfill project.

If you have any questions, please contact us.

Sincerely,

WARZYN ENGINEERING INC.



Jan C. Kucher, P.E.
Project Manager

[Triplicate]
JCK/vlr/JVS
[sss-107-86]
13928.48

Enclosures: As Stated

MONTHLY PROJECT REPORT - JULY 1990
REFUSE HIDEAWAY LANDFILL
GAS MONITORING AND COMMUNITY RELATIONS
AGREEMENT NO. 81217.89-3

Project Status:

Project work by Warzyn this month includes:

- Gas Monitoring - Gas monitoring data was evaluated and project management and administrative duties were performed.

Difficulties Encountered

No difficulties were encountered in this period.

Difficulties Resolved

No difficulties required resolution.

Activities for Next Month

Activities expected to occur next month include:

- Gas monitoring activities will continue in accordance with the Gas Monitoring Program.

Key Personnel Changes

None.

Additional Scope Activities

Project costs regarding gas monitoring and community relations activities have exceeded the current contract cost estimate. A work order will be prepared in August to address the additional costs incurred due to the 1990 rate increase and professional services performed beyond those included in the original Scope of Work.

Current Period Fees

Fees for the current period are \$658.28 (see invoice submitted, July 1990) under Agreement No. 81217.89-3.

Cumulative Fees

Cumulative fees are \$75,854.17.

JCK/vlr/JVS
[sss-107-85]
13928.48-MD

file

August 17, 1990

Ms. Theresa A. Evanson
Wisconsin Department of Natural Resources
Environmental Response & Repair Section
Bureau of Solid Waste Management
101 South Webster Street, GEF II, SW/3
P.O. Box 7921
Madison, Wisconsin 53707

Re: July 1990 Invoice
Interim Remedial Measures
Refuse Hideaway Landfill
Agreement No. 81217.89-2
Job 13928.48

Dear Ms. Evanson:

Enclosed are Warzyn's Monthly Progress Report, Invoice and completed WDNR form (Invoice for Professional Services, Request No. 12), for services and expenses regarding the Refuse Hideaway Landfill Interim Remedial Measures.

If you have any questions please contact us.

Sincerely,

WARZYN ENGINEERING INC.



Jan C. Kucher, P.E.
Project Manager

[Triplicate]
JCK/vlr/JVS
[sss-107-88]
13928.48

Enclosures: As stated

MONTHLY PROJECT REPORT - JULY 1990
REFUSE HIDEAWAY LANDFILL
INTERIM REMEDIAL MEASURES
AGREEMENT NO. 81217.89-2

Project Status:

Project work by Warzyn this month was on the following subtasks:

- Monitoring of P.O.E. treatment units was performed at Stoppleworth and Schultz residence on July 3rd.
- Partial Extraction System - Activities which were performed and documented by Warzyn include:
 - Interim system operation continued, with system checks performed on July 3 and 10, 1990.
 - Electrical testing associated with the leachate holding tank monitoring equipment was completed.
- Construction Documentation - Continued preparation of Construction Observation Report for the partial extraction system.
- Work continued on the design of the full gas and leachate extraction system and engineering report.
- Preparation of Construction Contract Documents was completed and documents were issued on August 1, 1990.

Difficulties Encountered

No difficulties were encountered in this period.

Difficulties Resolved

No difficulties required resolution.

Activities for Next Month

Activities expected to occur over the next month include:

- Monitor POE treatment unit at Stoppleworth and Schultz residences.
- Continue system interim operation.

- Prepare Generic Specifications for the WDNR's use.
- Complete preparation of the full gas and leachate extraction system design and engineering report.
- Complete preparation of the Construction Observation Report for the partial extraction system.

Key Personnel Changes

None.

Current Period Fees

Fees for the current period are \$43,873.84 (see invoice submitted, July 1990) under Agreement No. 81217.89-2.

Cumulative Fees

Cumulative fees are \$750,344.90.

Special Considerations

None.

Additional Scope Activities

Construction Contract Document progress was delayed approximately one week in June due to ground flare criteria revisions in the current draft of NR 445. Warzyn performed analysis and calculations to determine if the ground flare would be required according to NR 445 (cost of \$2,500).

JCK/vlr/JVS
[sss-107-87]
13928.48-MD



file

September 11, 1990

Ms. Theresa A. Evanson
Wisconsin Department of Natural Resources
Environmental Response & Repair Section
Bureau of Solid and Hazardous Waste Management
101 South Webster Street, GEF II, SW/3
P.O. Box 7921
Madison, Wisconsin 53707

RECEIVED

SEP 12 1990

**BUREAU OF SOLID -
HAZARDOUS WASTE MANAGEMENT**

Re: August 1990 Invoice
Interim Remedial Measures
Refuse Hideaway Landfill
Agreement No. 81217.89-2
Job 13928.48

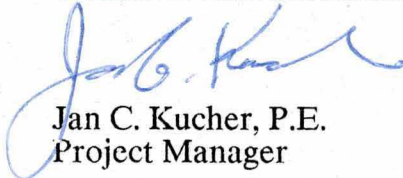
Dear Ms. Evanson:

Enclosed are Warzyn's Monthly Progress Report, Invoice and completed WDNR form (Invoice for Professional Services, Request No. 13), for services and expenses regarding the Refuse Hideaway Landfill Interim Remedial Measures.

If you have any questions please contact us.

Sincerely,

WARZYN ENGINEERING INC.


Jan C. Kucher, P.E.
Project Manager

[Triplicate]
JCK/jkk/JVS/SGW
[sss-107-88]
13928.48

Enclosures: As stated

THE PERFECT BALANCE
BETWEEN TECHNOLOGY
AND CREATIVITY.

MADISON
ONE SCIENCE COURT
P.O. BOX 5385
MADISON, WI 53705
(608) 231-4747
FAX (608) 273-2513





**MONTHLY PROJECT REPORT - AUGUST 1990
REFUSE HIDEAWAY LANDFILL
INTERIM REMEDIAL MEASURES
AGREEMENT NO. 81217.89-2**

Project Status:

Project work by Warzyn this month was on the following subtasks:

- Monitoring of P.O.E. treatment units was performed at Stoppeworth and Schultz residence on August 9th (Schultz residence monitoring also included tests for metals, indicator parameters, nitrate, nitrogen and total organic carbon).
- Partial Extraction System - Activities which were performed and documented by Warzyn include:
 - Interim system operation continued, with system checks performed on August 9, 15, and 23, 1990.
- Construction Documentation - Continued preparation of Construction Observation Report for the partial extraction system.
- Preparation of Construction Contract Documents was completed and documents were issued on August 1, 1990.
- The draft full gas and leachate extraction system design engineering report was submitted on August 9, 1990.

Difficulties Encountered

Mrs. Schultz called the WDNR to complain about water quality and taste.

The WDNR requested that additional inorganic parameters be added to the laboratory analysis in August.

Difficulties Resolved

The August 1990 inorganic analysis will be compared with the inorganic analysis performed in October 1989.

Activities for Next Month

Activities expected to occur over the next month include:

- Monitor POE treatment unit at Stoppeworth and Schultz residences.



- Continue system interim operation.
- Prepare Generic Specifications for the WDNR's use.
- Complete preparation of the full gas and leachate extraction system design and engineering report.
- Complete preparation of the Construction Observation Report for the partial extraction system.
- Prepare estimate of remediation costs.

Key Personnel Changes

None.

Current Period Fees

Fees for the current period are \$42,361.30 (see invoice submitted, August 1990) under Agreement No. 81217.89-2.

Cumulative Fees

Cumulative fees are \$792,706.20.

Special Considerations

None.

Additional Scope Activities

Additional laboratory analysis was performed on the Schultz residence water.



September 11, 1990

Ms. Theresa A. Evanson
Wisconsin Department of Natural Resources
Environmental Response & Repair Section
Bureau of Solid and Hazardous Waste Management
101 South Webster Street, GEF II, SW/3
Madison, Wisconsin 53707

RECEIVED

SEP 12 1990

BUREAU OF SOLID & HAZARDOUS WASTE MANAGEMENT

HAZARDOUS WASTE MANAGEMENT

Michelle S. Goodson

Re: August 1990 Invoice
Gas Monitoring Program and Community Relations Activities
Refuse Hideaway Landfill
Agreement No. 81217.89-3
Job 13928.87

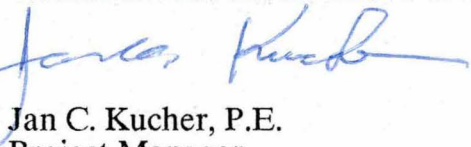
Dear Ms. Evanson:

Enclosed are Warzyn's Monthly Progress Report, Invoice and completed WDNR form (Invoice for Professional Services, Request No. 11), for services and expenses regarding the gas monitoring and community relations activities for the Refuse Hideaway Landfill project.

If you have any questions, please contact us.

Sincerely,

WARZYN ENGINEERING INC.



Jan C. Kucher, P.E.
Project Manager

[TriPLICATE]
JCK/jkk/JVS/SGW
[sss-107-86]
13928.48

Enclosures: As Stated

**MONTHLY PROJECT REPORT - AUGUST 1990
REFUSE HIDEAWAY LANDFILL
GAS MONITORING AND COMMUNITY RELATIONS
AGREEMENT NO. 81217.89-3**

Project Status:

Project work by Warzyn this month includes:

- Gas Monitoring - Gas monitoring was performed on August 2nd and 15th. Data was evaluated and project management and administrative duties were performed.

Difficulties Encountered

No difficulties were encountered in this period.

Difficulties Resolved

No difficulties required resolution.

Activities for Next Month

Activities expected to occur next month include:

- Gas monitoring activities will continue in accordance with the Gas Monitoring Program.

Key Personnel Changes

None.

Additional Scope Activities

Project costs regarding gas monitoring and community relations activities have exceeded the current contract cost estimate. Work Order No. 1 was submitted August 14th, addressing the additional costs incurred due to the 1990 rate increase and professional services performed beyond those included in the original Scope of Work. Warzyn met with the WDNR on August 28 to discuss Work Order No. 1.

Current Period Fees

Fees for the current period are \$983.59 (see invoice submitted, August 1990) under Agreement No. 81217.89-3.

Cumulative Fees

Cumulative fees are \$76,837.76.

JCK/jkk/JVS/SGW
[sss-107-85]
13928.87-MD



October 19, 1990

Ms. Theresa A. Evanson
Wisconsin Department of Natural Resources
Environmental Response & Repair Section
Bureau of Solid and Hazardous Waste Management
101 South Webster Street, GEF II, SW/3
P.O. Box 7921
Madison, Wisconsin 53707

Re: September 1990 Invoice
Interim Remedial Measures
Refuse Hideaway Landfill
Agreement No. 81217.89-2
Job 13928.48

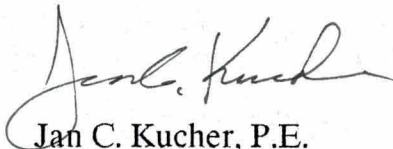
Dear Ms. Evanson:

Enclosed are Warzyn's Monthly Progress Report, Invoice and completed WDNR form (Invoice for Professional Services, Request No. 14), for services and expenses regarding the Refuse Hideaway Landfill Interim Remedial Measures.

If you have any questions please contact us.

Sincerely,

WARZYN ENGINEERING INC.



Jan C. Kucher, P.E.
Project Manager

[Triplicate]
JCK/sss/JVS/RWM
[jkk-110-76c]
13928.48-MD

Enclosures: As stated

MONTHLY PROJECT REPORT - SEPTEMBER 1990
REFUSE HIDEAWAY LANDFILL
INTERIM REMEDIAL MEASURES
AGREEMENT NO. 81217.89-2

Project Status:

Project work by Warzyn this month was on the following subtasks:

- Monitoring of P.O.E. treatment units was performed at Stoppleworth and Schultz residence on September 6th.
- Partial Extraction System - Activities which were performed and documented by Warzyn include the Interim system operation continued, with system checks performed on September 3, 6, 12 and 26, 1990.
- Construction Documentation - Continued preparation of Construction Observation Report for the partial extraction system.
- Generic Construction Specification - continued preparation.
- Remedial Action Cost Estimate - continued preparation.
- The full gas and leachate extraction system design engineering report was submitted on September 28, 1990 (final).
- Analytical costs associated with raw landfill gas were submitted.

Difficulties Encountered

The Schultz family complained of particulates in their water.

Difficulties Resolved

A particulate filter was installed at the Schultz residence.

Activities for Next Month

Activities expected to occur over the next month include:

- Monitor P.O.E. treatment unit at Stoppleworth and Schultz residences.
- Continue system interim operation.
- Prepare Generic Specifications for the WDNR's use.

- Complete preparation of the Construction Observation Report for the partial extraction system.
- Prepare estimate of remediation costs.

Key Personnel Changes

None.

Additional Scope Activities

As requested by the WDNR, Warzyn coordinated additional review of the plumbing systems at the Schultz and Stoppleworth residences as a result of their concerns expressed to the WDNR. As a result, an effluent particulate filter was installed at the Schultz residence and a letter report was submitted to the WDNR documenting the work performed and result accomplished. The additional cost was approximately \$1,200.00.

Current Period Fees

Fees for the current period have accumulated to \$17,143.28, however, \$9,343.80 will be invoiced (see invoice submitted, September 1990) under Agreement No. 81217.89-2.

Cumulative Fees

Cumulative fees are \$802,050.00. This is the total contract amount.

Special Considerations

The current period fee is \$17,143.28. If invoiced this would put the total fee over the contractual fee of \$802,050.00. We understand your tight budget regarding this project and after our recent discussions, we will only invoice \$9,343.80 this period. Therefore, this will be the final invoice (provided no work scope changes are made). Warzyn will complete its contract obligations and bring the project to conclusion as soon as possible. We appreciate the WDNR's consideration and acknowledgement in adjusting Warzyn's compensation as the scope of work has evolved.

RECEIVED

OCT 31 1990

BUREAU OF SOLID &
HAZARDOUS WASTE MANAGEMENT

October 30, 1990

Ms. Theresa A. Evanson
Wisconsin Department of Natural Resources
Environmental Response and Repair Section
Bureau of Solid and Hazardous Waste Management
101 S. Webster Street, GEFII, SW/3
P.O. Box 7921
Madison, Wisconsin 53707

Re: Status Report-Week of 10/22/90 - 10/26/90
Gas and Leachate Extraction System
Refuse Hideaway Landfill
Middleton, Wisconsin
Project No. 15292.01

Dear Ms. Evanson:

This week construction activities included the following:

Gas wells GW3, GW4, GW5, GW6, GW7, GW8, and GW9 were installed. All wells were constructed according to design with minimal changes. Gas well GW8 was placed 15 ft south of its proposed location (with Celia VanDerloop's approval) to keep proposed header pipe/trenches from crossing the drainage swale. The gas well 6" dia. SCH 80 PVC couplings were replaced with 6" dia. SCH 40 PVC couplings (to fit the 8" PVC pipe). The 6"x8" SCH 80 PVC reducer coupling does not contain Viton O-Rings as proposed. An air-tight seal is not necessary here since the bentonite seals for the borehole are located above the reducer coupling. The reducer coupling fits properly and will provide proper movement for the 6" pipe into the 8" pipe to compensate for landfill settlement.



Refuse samples were taken from wells GW3, GW4 and GW5 for TCLP analysis. Boreholes were logged and gas extraction wells were detailed on the proper forms. No leachate was encountered. Construction activities are documented with field reports, photographs and video recording. Terry Evanson of the WDNR, Jan Kucher of Warzyn, and TV reporters for WMTV and WKOW, visited the site on Wednesday, October 24, 1990 (both networks showed the story at 10 p.m.).

Sincerely,

WARZYN ENGINEERING INC.

Dean R. Free / JCK

Dean R. Free
Project Engineer

Jan C. Kucher

Jan C. Kucher, P.E.
Project Manager

JCK/ccf/DRF/SGW
[jlv-110-85]
15292.01





RECEIVED

NOV 07 1990

BUREAU OF SOLID -
HAZARDOUS WASTE MANAGEMENT

November 6, 1990

Ms. Theresa A. Evanson
Wisconsin Department of Natural Resources
Environmental Response and Repair Section
Bureau of Solid and Hazardous Waste Management
101 S. Webster Street, GEF II, SW/3
P.O. Box 7921
Madison, Wisconsin 53707

Re: Status Report-Week of 10/29/90 - 11/2/90
Gas and Leachate Extraction System
Refuse Hideaway Landfill
Middleton, Wisconsin
Project No. 15292.01

Dear Ms. Evanson:

This week construction activities included the following:

Gas wells GW10, GW11, GW12, and GW13 were installed on 10/29/90 and 10/30/90. All wells were constructed according to design with minimal changes. Boreholes were logged and gas extraction wells were detailed on the proper forms.

Refuse removed from each borehole has been segregated in the proposed refuse disposal area. Each refuse pile has been covered with cover soils taken from the refuse disposal area, and compacted into individual cells.

Borehole GW11 included several layers of perched liquids (leachate) during drilling. All wells will be inspected with an electronic tape early next week to determine if leachate exists in quantities which warrant extraction pumps.

Construction activities are documented with field reports, photographs and video recording. Terry Evanson and Jim Leverance of the WDNR and Jan Kucher of Warzyn visited the site on Monday October 29, 1990.

Earl Kopp, drilling foreman for Terra, stated that header piping and wellhead construction activities will not begin for approximately 1-2 weeks. Pipes and fittings are unavailable and are on backorder. Warzyn will contact WDNR as soon as construction is scheduled to resume.

THE PERFECT BALANCE
BETWEEN TECHNOLOGY
AND CREATIVITY.

MADISON
ONE SCIENCE COURT
P.O. BOX 5385
MADISON, WI 53705
(608) 231-4747
FAX (608) 273-2513





Warzyn submitted a letter to Terra with surveying information needed to confirm pipe slopes and elevations (copy attached).

Sincerely,

WARZYN ENGINEERING INC.

A handwritten signature in cursive script that reads "Dean R. Free".

Dean R. Free
Project Engineer

A handwritten signature in cursive script that reads "Jan C. Kucher".

Jan C. Kucher, P.E.
Project Manager

DRF/vlr/SGW
[wpmisc-110a-81]
15292.01-MD

Enclosures: Survey letter to Terra



November 16, 1990

RECEIVED

NOV 20 1990

BUREAU OF SOLID -
HAZARDOUS WASTE MANAGEMENT

Ms. Theresa A. Evanson
Wisconsin Dept. of Natural Resources
Environmental Response and Repair Section
Bureau of Solid and Hazardous Waste Management
101 S. Webster Street, GEF II, SW/3
P.O. Box 7921
Madison, Wisconsin 53707

RE: Status Report-Weeks of 11/5/90 - 11/16/90
Gas and Leachate Extraction System
Refuse Hideaway Landfill
Middleton, Wisconsin
Project No. 15292.01

Dear Ms. Evanson:

Construction and Engineering activities performed during this reporting period included the following:

- No construction activities occurred between 11-5 and 11-9. The contractor was waiting for pipe delivery.
- The site entrance road (from Hwy. 14 to Speedway Sand & Gravel) was graded and widened.
- As part of the site entrance gate, four steel posts were set in concrete.
- Piping and fittings were delivered to the site.
- Held Surveyors (sub to Terra Engineering & Construction) were on-site 11-12-90 to stake header piping locations.
- Liquid depth in the leachate storage tank was measured to be 0.8 ft (approximately 730 gallons).
- Leachate head was measured in all wells and in the two 1-in risers at each well. Results indicate high leachate head levels in wells GW8, GW9, and GW11 (see attached Leachate Head Table).
- Construction activities are documented with field reports and photographs.





- Warzyn drafted Change Order No. 2 for Terra (regarding pumping leachate in wells GW8, GW9 and GW11).
- Warzyn drafted Work Order No. 1 for Warzyn analysis of leachate/condensate.
- Warzyn contacted Terra to request expeditious submittal delivery (submittals from Terra were due in early November).

Please call with questions or comments.

Sincerely,

WARZYN ENGINEERING INC.

Dean R. Free / JCK

Dean R. Free
Project Engineer

Jan C. Kucher
Jan C. Kucher, P.E.
Project Manager

DRF/kma/JCK/RWM
[jkk-111-76]
15292.01-MD

Enclosure: Leachate Head Table



By: DRF 11-12-90
Chkd: JAL 11-13-90

LEACHATE HEAD TABLE
Refuse Hideaway Landfill
15292
Recorded 11-12-90

<u>Measurement Location</u>	<u>Well Depth (ft)</u>	<u>Leachate Depth (ft)</u>	<u>Leachate Head (ft)</u>	<u>Comments</u>
1. GW1 Well	N.A.	N.A.	N.A.	Existing Wellhead Head <0.4
East 1 in. Riser	53.7	53.3	No Reading	
West 1 in. Riser	54.1	53.4	0.7	
2. GW2 Well	N.A.	N.A.	N.A.	Existing Wellhead
East 1 in. Riser	53.9	51.0	2.9	
West 1 in. Riser	54.0	51.2	2.8	
3. GW3 Well	59.7	58.2	1.5	
East 1 in. Riser	59.7	57.0	2.7	
West 1 in. Riser	59.7	56.7	3.0	
4. GW4 Well	64.1	61.2	2.9	Head <0.4 Head <0.4
East 1 in. Riser	61.9	61.5	No Reading	
West 1 in. Riser	61.8	61.4	No Reading	
5. GW5 Well	73.1	71.2	1.9	
East 1 in. Riser	70.0	68.1	1.9	
West 1 in. Riser	69.9	68.2	1.7	
6. GW6 Well	39.4	39.0	No Reading	Head <0.4 Head <0.4 Head <0.4
East 1 in. Riser	40.0	39.6	No Reading	
West 1 in. Riser	40.1	39.7	No Reading	
7. GW7 Well	63.1	62.2	0.9	
East 1 in. Riser	60.0	59.4	0.6	
West 1 in. Riser	60.0	59.4	0.6	

**LEACHATE HEAD TABLE
(continued)**

<u>Measurement Location</u>	<u>Well Depth (ft)</u>	<u>Leachate Depth (ft)</u>	<u>Leachate Head (ft)</u>	<u>Comments</u>
8. GW8 Well	72.2	52.6	19.6	High Liquids
East 1 in. Riser	69.6	50.0	19.6	High Liquids
West 1 in. Riser	69.9	50.5	19.4	High Liquids
9. GW9 Well	69.2	56.6	12.6	High Liquids
East 1 in. Riser	67.5	54.9	12.6	High Liquids
West 1 in. Riser	68.4	55.7	12.7	High Liquids
10. GW10 Well	72.7	71.9	0.8	
North 1 in. Riser	72.8	72.1	0.7	
West 1 in. Riser	72.7	72.0	0.7	
11. GW11 Well	67.8	50.3	17.5	High Liquids
East 1 in. Riser	69.1	51.5	17.6	High Liquids
West 1 in. Riser	69.1	51.4	17.7	High Liquids
12. GW12 Well	82.5	81.7	0.9	
East 1 in. Riser	80.0	79.6	No Reading	Head <0.4
West 1 in. Riser	80.0	79.6	No Reading	Head <0.4
13. GW13 Well	72.9	72.1	0.8	
East 1 in. Riser	73.1	72.5	0.6	
West 1 in. Riser	73.0	72.3	0.7	

Note: 1. Well depths and leachate depths measured from top of pipes (6 in. well or 1 in. riser).
 2. Electronic tape can only detect liquids 0.4 ft above well base.

WARZYN

November 19, 1990

file
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NOV 21 1990

**BUREAU OF SOLID -
HAZARDOUS WASTE MANAGEMENT**

Ms. Theresa A. Evanson
Wisconsin Department of Natural Resources
Environmental Response & Repair Section
Bureau of Solid and Hazardous Waste Management
101 South Webster Street, GEF II, SW/3
P.O. Box 7921
Madison, Wisconsin 53707

Re: October 1990 Invoice
Construction Phase Services
Refuse Hideaway Landfill
WDNR Project No. 3144
Job 15292.01

Dear Ms. Evanson:

We are enclosing the following items:

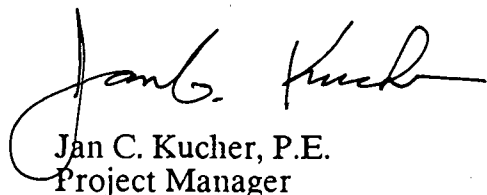
- Monthly Progress Report
- Task and Labor Progress Summary
- Invoice for Professional Services (State of Wisconsin WDNR form)
- Project Invoices on a task by task basis.

Please call if you have questions or comments

Thank you.

Sincerely,

WARZYN ENGINEERING INC.


Jan C. Kucher, P.E.
Project Manager

[TriPLICATE]
JCK/ccf/JVS/TFL
[wpmisc-111-68]
15292.01-MD

THE PERFECT BALANCE
BETWEEN TECHNOLOGY
AND CREATIVITY.

Enclosures: As stated

MADISON
ONE SCIENCE COURT
P.O. BOX 5385
MADISON, WI 53705
(608) 231-4747
FAX (608) 273 2513

MONTHLY PROJECT REPORT - OCTOBER 1990
REFUSE HIDEAWAY LANDFILL
CONSTRUCTION PHASE SERVICES
WDNR PROJECT NO. 3144

Project Status:

Project work by Warzyn this month was on the following subtasks:

- Observed and documented construction of gas & leachate extraction wells.
- TCLP samples were taken from the borehole spoils.
- Change Order No. 1 (Terra Engineering & Construction Corporation) was written.
- Meeting with WDNR was held on Site on Friday, October 26.
- A weekly construction progress letter report was submitted to the WDNR.

Difficulties Encountered

The Schultz and Stoppleworth family complained of particulates in their water.

Difficulties Resolved

A review of residential water chemistry was performed.

Activities for Next Month

Activities expected to occur over the next month include:

- Monitor P.O.E. treatment units at Stoppleworth and Schultz residences.
- Begin system interim O&M.
- Review contractor's submittals.
- Observe and document pipe construction.

- The results of the residential water chemistry evaluation was submitted to the WDNR in a letter report.

Key Personnel Changes

None.

Additional Scope Activities

As requested by the WDNR, Warzyn reviewed the water chemistry at the Schultz and Stoppeworth residences. This was performed as a result of the residents' concerns regarding iron staining and corrosion possibilities in their water. The additional cost was \$433.13. We understand this will be addressed as Change Order No. 1.

Current Period Fees

Fees for the current period are \$9199.64 (see the attached invoice for task by task costs).

Cumulative Fees

Cumulative fees are \$9199.64.

Special Considerations

None.

JCK/ccf/TFL
[wpmisc-111-70]
15292.01-MD



RECEIVED

DEC 12 1990

BUREAU OF SOLID -
HAZARDOUS WASTE MANAGEMENT

December 10, 1990

Ms. Theresa A. Evanson
Wisconsin Dept. of Natural Resources
Environmental Response and Repair Section
Bureau of Solid and Hazardous Waste Management
101 S. Webster Street, GEF II, SW/3
P.O. Box 7921
Madison, Wisconsin 53707

RE: Status Report-Weeks of 11/19/90 - 11/30/90
Gas and Leachate Extraction System
Refuse Hideaway Landfill
Middleton, Wisconsin
Project No. 15292.01

Dear Ms. Evanson:

Construction and Engineering activities performed during this reporting period included the following:

- Installation of site entrance gate completed.
- A representative clay sample was obtained by Warzyn and submitted for analysis. The clay borrow source is located at Northwestern Stone, 4343 Pleasant View Rd., Middleton, WI.
- Liquid depth in the leachate storage tank was measured to be 1.80 ft (approximately 2400 gallons), on 11-29-90.
- Electrical conductor in HDPE conduit was installed below grade during this reporting period. Conductor and conduit have been brought above grade at locations for future installations of the junction box and vacuum switches.
- Terra pumped leachate from well GW8 on 11-20-90 into a tank truck and later transferred it to the on-site leachate tank. On 11-26-90, leachate was pumped from GW9 for 3 hours and from GW11 for 2 hours. Leachate from these two wells was also transferred to the on-site leachate tank by tank truck (see attached table of leachate head data).

THE PERFECT BALANCE
BETWEEN TECHNOLOGY
AND CREATIVITY.

MADISON
ONE SCIENCE COURT
P.O. BOX 5385
MADISON, WI 53705
(608) 231-4747
FAX (608) 273-2513





- Leachate/condensate from the tank was sampled and submitted by Dean Free of Warzyn for analyses per Work Order No. 2 on 11-29-90.
- Construction activities are documented with field reports and photographs.
- Warzyn drafted Change Order No. 1 and 2 (Warzyn) and Change Order No. 3 (Terra).

Please call with questions or comments.

Sincerely,

WARZYN ENGINEERING INC.

A handwritten signature in brown ink that reads "Dean R. Free".

Dean R. Free
Project Engineer

A handwritten signature in blue ink that reads "Jan C. Kucher".
Jan C. Kucher, P.E.
Project Manager

DRF/ccf/jCK/SGW
[mpb-111-67]
15292.01-MD

Enclosure: Leachate Head Table



Leachate Head Table
 Refuse Hideaway Landfill
 15292

<u>Measurement Location</u>	<u>Leachate Head (Ft.)</u>	<u>Date Measured</u>	<u>Time Measured</u>	<u>Comments</u>
1. GW8	19.6	11-12-90	--	--
	Not Available	11-20-90	8:05 AM	Pump Started
	0	"	11:05 AM	Pump Stopped
	6.5	"	12:05 PM	1 hr Later
	10.0	"	1:05 PM	2 hr Later
	19.6	11-26-90	--	Well Recharged
	19.2	11-29-90	--	--
2. GW9	12.6	11-12-90	--	--
	16.3	11-20-90	--	--
	17.4	11-26-90	8:45 AM	Pump Started
	10.9	"	11:50 AM	Pump Stopped
	12.2	"	12:50 PM	1 hr Later
	12.9	"	1:50 PM	2 hr Later
	13.4	"	2:50 PM	3 hr Later
	13.9	"	3:50 PM	4 hr Later
15.3	11-29-90	--	Well Recharged	
3. GW11	17.5	11-12-90	--	--
	21.2	11-20-90	--	--
	23.2	11-26-90	12:30 PM	Pump Started
	9.8	"	2:30 PM	Pump Stopped
	14.2	"	3:30 PM	1 hr Later
	16.8	"	4:00 PM	1.5 hr Later
22.1	11-29-90	--	Well Recharged	
4. Tank	0.80 (730 gal.)	11-12-90	--	--
	1.05 (1016 gal.)	11-21-90	--	Leachate Added
	1.80 (2400 gal.)	11-29-90	--	Leachate Added

JCK/mpb
 [mpb-112-67a]
 15292.01

January 25, 1991

RECEIVED

JAN 30 1991

BUREAU OF SOLID -
HAZARDOUS WASTE MANAGEMENT

Ms. Theresa A. Evanson
Wisconsin Department of Natural Resources
Environmental Response & Repair Section
Bureau of Solid and Hazardous Waste Management
101 South Webster Street, GEF II, SW/3
P.O. Box 7921
Madison, Wisconsin 53707

Re: December 1990 Invoice (#3)
Construction Phase Services
Refuse Hideaway Landfill
WDNR Project No. 3144
Job 15292.01

Dear Ms. Evanson:

We are enclosing the following items:

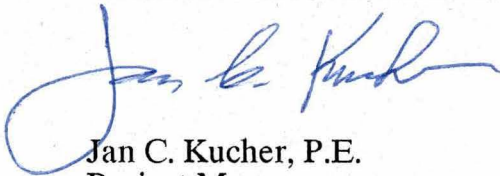
- Monthly Project Report
- Task and Labor Progress Summary
- Invoice for Professional Services (WDNR form)
- Project Invoices on a task by task basis.

Please call if you have questions or comments

Thank you.

Sincerely,

WARZYN ENGINEERING INC.



Jan C. Kucher, P.E.
Project Manager

[Triplicate]
DRF/mpb/JCK/RWM
[vlr-112-95]
15292.01-MD

Enclosures: As stated



MONTHLY PROJECT REPORT - NOVEMBER 1990
REFUSE HIDEAWAY LANDFILL
CONSTRUCTION PHASE SERVICES
WDNR PROJECT NO. 3144

Project Status

Project work by Warzyn this month was on the following subtasks:

- Coordinated and expedited submittal process.
- Measured and recorded leachate head levels in all wells and leachate storage tank.
- Meeting (#3) was held on 12/18 at GEF II with WDNR and Terra Engineering & Construction to discuss project status and change orders.
- Drafted Construction Change Order No. 3 for Terra (regarding credits for leachate system).
- Performed TCLP analysis of refuse spoil samples.
- Drafted Change Order No.3 for Warzyn analysis of refuse spoil sample GW3-2 for three additional TCLP lead analyses.
- System interim O & M checks were performed on 12/7 and 12/28.
- P.O.E. units were sampled on 12/7.

Difficulties Encountered

Due to thick frost (approximately 3 feet) the contractor was unable to construct gas and leachate piping.

Activities for Next Month

Activities expected to occur over the next month include:

- Monitor P.O.E. treatment units at Stoppleworth and Schultz residences.
- Continue system interim O & M and gas monitoring of probes and residences.
- Review contractor's submittals.

Key Personnel Changes

None.

Additional Scope Activities

Warzyn proceeded with additional TCLP lead analysis for refuse spoil sample GW3 as directed by Theresa Evanson. Change Order No. 3 addressing additional TCLP lead analyses needs to be signed by the WDNR.

Current Period Fees

Fees for the current period are \$16,425.41 (see the attached invoice for task by task costs).

Cumulative Fees

Cumulative fees are \$46,290.02.

DRF/mpb/JCK/RWM
[vlr-112-95a]
15292.01-MD



RECEIVED

FEB 15 1991

BUREAU OF SOLID -
HAZARDOUS WASTE MANAGEMENT

February 12, 1991

Ms. Theresa A. Evanson
Wisconsin Department of Natural Resources
Environmental Response & Repair Section
Bureau of Solid and Hazardous Waste Management
101 South Webster Street, GEF II, SW/3
P.O. Box 7921
Madison, Wisconsin 53707

Re: January 1991 Invoice (#4)
Construction Phase Services
Refuse Hideaway Landfill
WDNR Project No. 3144
Job 15292.01

Dear Ms. Evanson:

We are enclosing the following items:

- Monthly Project Report
- Task and Labor Progress Summary
- Invoice for Professional Services (WDNR form)
- Project Invoices on a task by task basis.

Please call if you have questions or comments

Thank you.

Sincerely,

WARZYN ENGINEERING INC.

Jan C. Kucher, P.E.
Project Manager

[Triplicate]
DRF/kmj/JCK/JVS/DFK
[vir-112-95]
15292.01-MD

Enclosures: As stated

THE PERFECT BALANCE
BETWEEN TECHNOLOGY
AND CREATIVITY.

MADISON
ONE SCIENCE COURT
P.O. BOX 5385
MADISON, WI 53705
(608) 231-4747
FAX (608) 273-2513





MONTHLY PROJECT REPORT

MONTHLY PROJECT REPORT - JANUARY 1991 REFUSE HIDEAWAY LANDFILL CONSTRUCTION PHASE SERVICES WDNR PROJECT NO. 3144

Project Status

Project work by Warzyn this month was on the following subtasks:

- Coordinated and expedited submittal process.
- Drafted Construction Change Order No. 4 for Terra (regarding disposal of GW3 borehole spoils).
- Worked to expedite Construction Change Order No. 3 for Terra (regarding credits for leachate system).
- Performed Analytical & TCLP analyses of leachate/condensate from storage tank.
- System interim O & M checks were performed on 1/9/91 and 1/18/91.
- P.O.E. units were sampled on 12/28/90.
- Gas Monitoring of probes, Speedway buildings and residences performed on 1/20/91 and 1/22/91.
- Placed chain and padlocks on site entrance gate and distributed keys.

Difficulties Encountered

None.

Activities for Next Month

Activities expected to occur over the next month include:

- Change out G.A.C. at P.O.E. treatment units at Stoppleworth and Schultz residences.
- Continue system interim O & M and gas monitoring of probes and residences.
- Review contractor's submittals.
- Prepare draft O & M manual.



Key Personnel Changes

None.

Additional Scope Activities

Change Order No. 3 was signed by the WDNR addressing TCLP lead analyses for GW3 borehole spoils.

Current Period Fees

Fees for the current period are \$9,755.00 (see the attached invoice for task by task costs).

Cumulative Fees

Cumulative fees are \$56,045.02.

DRF/kml/JCK/JVS/DFK
[vlr-112-95a]
15292.01-MD

March 11, 1991

RECEIVED

MAR 18 1991

BUREAU OF SOLID -
HAZARDOUS WASTE MANAGEMENT

Ms. Theresa A. Evanson
Wisconsin Department of Natural Resources
Environmental Response & Repair Section
Bureau of Solid and Hazardous Waste Management
101 South Webster Street, GEF II, SW/3
P.O. Box 7921
Madison, Wisconsin 53707

Re: February 1991 Invoice (#5)
Construction Phase Services
Refuse Hideaway Landfill
WDNR Project No. 3144
Job 15292.01

Dear Ms. Evanson:

We are enclosing the following items:

- Monthly Project Report
- Task and Labor Progress Summary
- Invoice for Professional Services (WDNR form)
- Project Invoices on a task by task basis.

Please call if you have questions or comments

Thank you.

Sincerely,

WARZYN ENGINEERING INC.



Jan C. Kucher, P.E.
Project Manager

[Triplicate]
JCK/aao/JVS/RWM
[vir-103-91]
15292.01-MD

Enclosures: As stated





MONTHLY PROJECT REPORT

MONTHLY PROJECT REPORT - FEBRUARY 1991 REFUSE HIDEAWAY LANDFILL CONSTRUCTION PHASE SERVICES WDNR PROJECT NO. 3144

Project Status

Project work by Warzyn this month was on the following subtasks:

- Coordinated and expedited submittal process (worked with Terra and Linklater).
- Performed submittal technical review.
- System interim O & M checks were performed on 2/6/91 and 2/21/91.
- Changed out G.A.C. treatment units at Stoppeworth residence on 2/26/91.
- Gas Monitoring of probes, Speedway buildings and residences performed on 2/6/91.

Difficulties Encountered

None.

Activities for Next Month

Activities expected to occur over the next month include:

- Continue system interim O & M and gas monitoring of probes and residences.
- Review contractor's submittals.
- Prepare draft O & M manual.
- Begin construction observation of gas and leachate header piping.

Key Personnel Changes

None.

Additional Scope Activities

None.





Current Period Fees

Fees for the current period are \$10,904.48 (see the attached invoice for task by task costs).

Cumulative Fees

Cumulative fees are \$66,949.50.

JCK/aao/RWM
[vlr-103-91a]
15292.01-MD





April 9, 1991

RECEIVED

APR 12 1991

BUREAU OF SOLID -
HAZARDOUS WASTE MANAGEMENT

Ms. Theresa A. Evanson
Wisconsin Department of Natural Resources
Environmental Response & Repair Section
Bureau of Solid and Hazardous Waste Management
101 South Webster Street, GEF II, SW/3
P.O. Box 7921
Madison, Wisconsin 53707

Re: March 1991 Invoice (#6)
Construction Phase Services
Refuse Hideaway Landfill
WDNR Project No. 3144
Job 15292.01

Dear Ms. Evanson:

We are enclosing the following items:

- Monthly Project Report
- Task and Labor Progress Summary
- Invoice for Professional Services (WDNR form)
- Project Invoices on a task by task basis.

Please call if you have questions or comments

Thank you.

Sincerely,

WARZYN ENGINEERING INC.

Dean R. Free
Project Engineer

Jan C. Kucher, P.E.
Project Manager

[Triplicate]
DRF/JCK/ndj/JVS/WB
[ndj 104-84]
15292.01-MD

THE PERFECT BALANCE
BETWEEN TECHNOLOGY
AND CREATIVITY.

Enclosures: As stated

MADISON
ONE SCIENCE COURT
P.O. BOX 5385
MADISON, WI 53705
(608) 231-4747
FAX (608) 273-2513



MONTHLY PROJECT REPORT

MONTHLY PROJECT REPORT - MARCH 1991 REFUSE HIDEAWAY LANDFILL CONSTRUCTION PHASE SERVICES WDNR PROJECT NO. 3144

Project Status

Project work by Warzyn this month was on the following subtasks:

- Coordinated and expedited submittal process (worked with Terra and Linklater).
- Performed submittal technical review.
- System interim O & M checks were performed on 3/13/91 and 3/28/91.
- Changed out G.A.C. treatment units at Schultz residence on 3/06/91.
- Gas Monitoring of probes, Speedway buildings and residences performed on 3/13/91.
- Prepared draft of Change Order Number 5 to Terra (extension of completion date).

Difficulties Encountered

- Delays by Contractor (only flare fabrication proceeded).

Activities for Next Month

Activities expected to occur over the next month include:

- Continue system interim O & M and gas monitoring of probes and residences.
- Submit outline of O & M manual.
- Begin construction observation of gas and leachate header piping.
- Perform P.O.E. sampling at Stoppleworth and Schultz residences.

Key Personnel Changes

None.

~~Additional Scope Activities~~ Activities for Next Month

Warzyn will be evaluating the effect of the new completion date on the observation budget.



Current Period Fees

Fees for the current period are \$ 9,426.46 (see the attached invoice for task by task costs).

Cumulative Fees

Cumulative fees are \$76,375.96.

DRF/JCK/ndj/JVS/WB
[ndj-104-84A]
15292.01-MD



May 10, 1991

Ms. Theresa A. Evanson
Wisconsin Department of Natural Resources
Environmental Response & Repair Section
Bureau of Solid and Hazardous Waste Management
101 South Webster Street, GEF II, SW/3
P.O. Box 7921
Madison, Wisconsin 53707

Re: April 1991 Invoice (#7)
Construction Phase Services
Refuse Hideaway Landfill
WDNR Project No. 3144
Job 15292.01

Dear Ms. Evanson:

We are enclosing the following items:

- Monthly Project Report
- Task and Labor Progress Summary
- Invoice for Professional Services (WDNR form)
- Project Invoices on a task by task basis.

Please call if you have questions or comments.

Thank you.

Sincerely,

WARZYN INC.

Dean R. Free / JCK

Dean R. Free
Project Engineer

Jan C. Kucher
Jan C. Kucher, P.E.
Project Manager

[Triplicate]
DRF/JCK/kml/RWM
[mad-105-32]
15292.01-MD

THE PERFECT BALANCE
BETWEEN TECHNOLOGY
AND CREATIVITY.

MADISON
ONE SCIENCE COURT
P.O. BOX 5385
MADISON, WI 53705
(608) 231-4747
FAX (608) 273-2513

Enclosures: As stated



MONTHLY PROJECT REPORT

MONTHLY PROJECT REPORT - APRIL 1991 REFUSE HIDEAWAY LANDFILL CONSTRUCTION PHASE SERVICES WDNR PROJECT NO. 3144

Project Status

Project work by Warzyn this month was on the following subtasks:

- Coordinated and expedited submittal process (worked with Terra and Linklater).
- Performed submittal technical review.
- System interim O & M checks were performed on April 3, 1991. Interim O&M for partial system complete.
- Performed P.O.E. sampling at Stoppleworth and Schultz residences on April 3, 1991.
- Gas and Leachate Extraction System construction was initiated April 15, 1991.
- Performed construction observation of gas and leachate header piping.
- Gas Monitoring of probes, Speedway buildings and residences performed on April 18, 22, 24 and 25, 1991. Program for gas monitoring services complete.
- Submitted Change Order Number 5 to Terra (extension of completion date).

Difficulties Encountered

None.

Activities for Next Month

Activities expected to occur over the next month include:

- Submit outline of O & M manual.
- Meet with WDNR to discuss O&M of system.

Key Personnel Changes

None.

Additional Scope Activities

None.



Current Period Fees

Fees for the current period are \$14,723.20 (see the attached invoice for task by task costs).

Cumulative Fees

Cumulative fees are \$91,099.16.

DRF/JCK/kml/RWM
[mad-105-32a]
15292.01-MD

June 10, 1991

Ms. Theresa A. Evanson
Wisconsin Department of Natural Resources
Environmental Response & Repair Section
Bureau of Solid and Hazardous Waste Management
101 South Webster Street, GEF II, SW/3
P.O. Box 7921
Madison, Wisconsin 53707

Re: May 1991 Invoice (#8)
Construction Phase Services
Refuse Hideaway Landfill
WDNR Project No. 3144
Job 15292.01

RECEIVED
JUN 11 1991
BUREAU OF SOLID -
HAZARDOUS WASTE MANAGEMENT

Dear Ms. Evanson:

We are enclosing the following items:


- Monthly Project Report
- Task and Labor Progress Summary
- Invoice for Professional Services (WDNR form)
- Project Invoices on a task by task basis.

Please call if you have questions or comments.

Thank you.

Sincerely,

WARZYN INC.



Jan C. Kucher, P.E.
Project Manager

[Triplicate]
DRF/JCK/vlr/JVS/DFK
[mad-106-47]
15292.01-MD

Enclosures: As stated



MONTHLY PROJECT REPORT

MONTHLY PROJECT REPORT - MAY 1991 REFUSE HIDEAWAY LANDFILL CONSTRUCTION PHASE SERVICES WDNR PROJECT NO. 3144

Project Status

Project work by Warzyn this month was on the following subtasks:

- Performed construction observation of gas and leachate extraction system.
- Program for gas monitoring services complete May 1, 1991. Gas Monitoring Program Final Report submitted June 4, 1991.

Difficulties Encountered

None.

Activities for Next Month

Activities expected to occur over the next month include:

- Begin preparation of Construction Observation Report.
- Submit Change Order Number 6 to Terra for labeling system components.
- Meet with WDNR to discuss O&M of system.

Key Personnel Changes

None.

Additional Scope Activities

None.

Current Period Fees

Fees for the current period are \$9,862.73 (see the attached invoice for task by task costs).

Cumulative Fees

Cumulative fees are \$100,961.89.



June 10, 1991

Ms. Theresa A. Evanson
Wisconsin Dept. of Natural Resources
Environmental Response and Repair Section
Bureau of Solid and Hazardous Waste Management
101 S. Webster Street, GEF II, SW/3
P.O. Box 7921
Madison, Wisconsin 53707

RECEIVED
JUN 12 1991
BUREAU OF SOLID -
HAZARDOUS WASTE MANAGEMENT

Re: Status Report - Period of 5/4/91 to 5/31/91
Gas and Leachate Extraction System
Refuse Hideaway Landfill
Middleton, Wisconsin
Project No. 15292.01

Dear Ms. Evanson:

Construction documentation and engineering activities performed during this reporting period included the following:

- The concrete slab for the tank loadout was poured on May 2nd.
- The system piping and appurtenances were pressure tested May 6th (A pressure of 3.0 psig was maintained for 30 minutes per specifications).
- The blower and partial system flare were shut-off May 7th to facilitate construction activities.
- Refuse spoils from GW3 were removed from the refuse disposal area and buried northwest of Well GW3 on May 8th.
- Dripleg, DL2, was modified on May 14th.
- Vacuum switches were installed May 20th.
- The flare stack was delivered and installed on May 21st.
- Other items installed this period include: wellheads (with insulation), blower building piping and equipment, buried piping from DL3/DL4 to DL1 and to the blower building.
- Construction activities were documented with field reports and photographs.





Please call with questions or comments.

Sincerely,

WARZYN INC.

A handwritten signature in blue ink that reads "Dean R. Free". The signature is fluid and cursive.

Dean R. Free
Project Engineer

A handwritten signature in green ink that reads "Jan C. Kucher". The signature is fluid and cursive.

Jan C. Kucher, P.E.
Project Manager

DRF/kml/JCK/DFK
[MAD-105-24]
15292.01



WARZYN INC. One Science Court, Madison, Wisconsin 53705

July 22, 1991

Client: Wisconsin DNR
 Environmental Response &
 Repair Section
 Bureau of Solid & Hazardous
 Waste Management
 101 South Webster Street
 GEF II, SW/3, P.O. Box 7921
 Madison, WI 53707

Reporting Month: June 1991
WDNR Project No.: 3144
Re: June 1991 Invoice (#9)
 Construction Phase
 Services
 Refuse Hideaway Landfill
 WDNR Project No. 3144
 Job 15292.01

Attention: Ms. Theresa A. Evanson

P.M. Jan C. Kucher, P.E. *JCK*

Monthly Activity Summary:

Project work by Warzyn this month was on the following subtasks:

- Performed construction observation of gas and leachate extraction system.
- Setup Startup of gas and leachate system

Work Scope/Budget Changes:

None

Activities for Next Month:

Activities expected to occur over the next month include:

- Preparation of Construction Observation Report and Operations and Maintenance Manual
- Startup of gas system.

Key Personnel Changes:

None.

Additional Scope Activities:

None.

Current Period Fees:

Fees for the current period are \$9,901.81 (see the attached invoice for task by task costs).

Cumulative Fees:

Cumulative fees are \$110,863.70.

JCK/ccf/JVS/TFL
 [mad-107-03]
 15292.02





MONTHLY PROJECT REPORT

WARZYN INC. One Science Court, Madison, Wisconsin 53705

August 13, 1991

Client: Wisconsin DNR
Environmental Response &
Repair Section
Bureau of Solid & Hazardous
Waste Management
101 South Webster Street
GEF II, SW/3, P.O. Box 7921
Madison, WI 53707

Reporting Month: July 1991
WDNR Project No.: 3144
Re: July 1991 Invoice (#10)
Construction Phase
Services
Refuse Hideaway Landfill
WDNR Project No. 3144
Job 15292.01

Attention: Ms. Theresa A. Evanson

P.M. Jan C. Kucher, P.E. JCK

Monthly Activity Summary:

Project work by Warzyn this month was on the following subtasks:

- Performed P.O.E. monitoring;
- Performed construction observation of gas and leachate extraction system;
- Performed start-up of flare and gas extraction system; and
- Prepared QA/QC documentation for P.O.E. monitoring.

Work Scope/Budget Changes:

Change Order No. 4 addressing additional VOC gas analysis.

Activities for Next Month:

Activities expected to occur over the next month include:

- Landfill gas testing to be performed;
- Preparation of Construction Observation Report and Operation and Maintenance Manual;
- Start-up of leachate extraction system; and
- Completion of remaining construction activities.

Key Personnel Changes:

None.

Additional Scope Activities:

None.

Current Period Fees:

Fees for the current period are \$17,568.46 (see the attached invoice for task by task costs).

Cumulative Fees:

Cumulative fees are \$128,432.16.

JCK/ccf/DFK [mad-107-03] 15292.02

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AUG 15 91
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WASTE MANAGEMENT



MONTHLY PROJECT REPORT

WARZYN INC. One Science Court, Madison, Wisconsin 53705

September 11, 1991

Client: Wisconsin DNR
Environmental Response &
Repair Section
Bureau of Solid & Hazardous
Waste Management
101 South Webster Street
GEF II, SW/3, P.O. Box 7921
Madison, WI 53707

Reporting Month: August 1991
WDNR Project No.: 3144
Re: August 1991 Invoice (#11)
Construction Phase
Services
Refuse Hideaway Landfill
Job 15292.01

Attention: Ms. Theresa A. Evanson

P.M. Jan C. Kucher, P.E. JCK

Monthly Activity Summary:

Project work by Warzyn this month was on the following subtasks:

- Expedited completion of Terra's punch list items;
- Performed construction observation of gas and leachate extraction system;
- Started leachate extraction system;
- Electric Motor Service Co. serviced blower;
- Warzyn and Forster Electrical Engineers worked to resolve flare startup issues;
- Initiated preparation of draft operation and maintenance manual;
- Performed operation and maintenance of flare and gas extraction system;
- Prepared QA/QC verification documentation for P.O.E. monitoring;
- Initiated preparation of draft construction observation report; and
- System O&M was performed including responding to frequent telemetry alarm calls.

Work Scope/Budget Changes:

Warzyn performed services in exceedance of the Task 1 construction observation budget (by approximately \$3,700) which was discussed in our telephone conversation on September 3. The additional service was performed due to the schedule extension from April 1, 1991 to September 1, 1991). The overall project budget is not exceeded even though Task 1 has been exceeded. We expect that completion of Terra's punch list items can be completed very soon.

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WASTE MANAGEMENT



Activities for Next Month:

Activities expected to occur over the next month include:

- Landfill gas testing results to be reported;
- Continue preparation of Construction Observation Report and Operation and Maintenance Manual;
- Start-up of leachate extraction system; and
- Completion of remaining construction activities.

Key Personnel Changes:

None.

Additional Scope Activities:

- P.O.E. lab QA/QC data was verified and summarized as requested by WDNR;
- Warzyn performed system operation and maintenance; and
- Change order No. 5 will be prepared addressing interim system operation and maintenance services for a 6 month period beginning September 1, 1991.

Current Period Fees:

Fees for the current period are \$21,858.68 (see the attached invoice for task by task costs).

Cumulative Fees:

Cumulative fees are \$150,290.84.

JCK/ccf/JVS.
[mad-109-95]
15292.02

WARZYN INC. One Science Court, Madison, Wisconsin 53705

October 14, 1991

Client: Wisconsin DNR
 Environmental Response &
 Repair Section
 Bureau of Solid & Hazardous
 Waste Management
 101 South Webster Street
 GEF II, SW/3, P.O. Box 7921
 Madison, WI 53707

Reporting Month: September 1991
WDNR Project No.: 3144
Re: August 1991 Invoice (#12)
 Construction Phase
 Services
 Refuse Hideaway Landfill
 Job 15292.01

Attention: Ms. Theresa A. Evanson

P.M. Jan C. Kucher, P.E. *JCK*

Monthly Activity Summary:

Project work by Warzyn this month was on the following subtasks:

- Expedited completion of Terra's punch list items;
- Landfill gas test results were reported;
- Warzyn and Forster Electrical Engineers worked to resolve flare startup issues;
- Submitted draft Operation and Maintenance Manual;
- Continued preparation of construction observation report;
- System O&M was performed including responding to frequent telemetry alarm calls; and
- Second leachate sample was analyzed.

- QA/QC Data prepared for Superfund Scoring Package billed to Task 4.

Work Scope/Budget Changes:

Change Order No. 5 was submitted to address system operation and maintenance from September 1, 1991 to January 1, 1992. The change order was approved by the WDNR on October 8, 1991.

Activities for Next Month:

Activities expected to occur over the next month include:

- Complete preparation of Construction Observation Report;
- Final Operation and Maintenance Manual; and
- Analyze third leachate sample.



Key Personnel Changes:

None.

Additional Scope Activities:

None

Current Period Fees:

Fees for the current period are \$39,719.56 (see the attached invoice for task by task costs).

Cumulative Fees:

Cumulative fees are \$190,010.40.

MONTHLY PROJECT REPORT

WARZYN INC. One Science Court, Madison, Wisconsin 53705

November 6, 1991

Client: Wisconsin DNR
 Environmental Response &
 Repair Section
 Bureau of Solid & Hazardous
 Waste Management
 101 South Webster Street
 GEF II, SW/3, P.O. Box 7921
 Madison, WI 53707

Reporting Month: October 1991
WDNR Project No.: 3144
Re: October 1991 Invoice (#13)
 Construction Phase
 Services
 Refuse Hideaway Landfill
 Job 15292.01

Attention: Ms. Theresa A. Evanson

P.M. Jan C. Kucher, P.E. *JCK*

Monthly Activity Summary:

Project work by Warzyn this month was on the following subtasks:

- Expedited completion of Terra's punch list items;
- Performed analysis of P.O.E. water samples;
- Continued preparation of construction observation report;
- System O&M was performed including responding to telemetry alarm calls; and
- Third leachate sample was collected for analysis; and
- Forster Electrical completed system start-up tasks.

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 NOV 08 1991
 BUREAU OF SOLID
 HAZARDOUS WASTE MANAGEMENT

Work Scope/Budget Changes:

None

Activities for Next Month:

Activities expected to occur over the next month include:

- Complete preparation of Construction Observation Report;
- Final Operation and Maintenance Manual;
- Continue operation and maintenance of system;
- Report analysis of third leachate sample;
- Schedule leachate tank loadout and hauling to MMSD; and
- Observe completion of Terra Change Order No. 9.



Key Personnel Changes:

Mr. Joel Faeth will be assisting in Operation and Maintenance tasks.

Additional Scope Activities:

None

Current Period Fees:

Fees for the current period are \$15,050.93 (see the attached invoice for task by task costs).

Cumulative Fees:

Cumulative fees are \$205,061.33.

MONTHLY PROJECT REPORT

WARZYN INC. One Science Court, Madison, Wisconsin 53705

December 19, 1991

Client: Wisconsin DNR
Environmental Response &
Repair Section
Bureau of Solid & Hazardous
Waste Management
101 South Webster Street
GEF II, SW/3, P.O. Box 7921
Madison, WI 53707

Reporting Month: November 1991
WDNR Project No.: 3144
Re: November 1991 Invoice (#14)
Construction Phase
Services
Refuse Hideaway Landfill
Job 15292.01

Attention: Ms. Theresa A. Evanson

P.M. Jan C. Kucher, P.E. *JCK*

Monthly Activity Summary:

Project work by Warzyn this month was on the following subtasks:

- Completed preparation of Construction Observation Report;
- System O&M was performed including responding to telemetry alarm calls;
- Completed preparation of Operation and Maintenance Manual;
- Reported results for the third leachate sample analysis; and
- Observed completion of Terra Construction items.

Work Scope/Budget Changes:

None

Activities for Next Month:

Activities expected to occur over the next month include:

- Continue operation and maintenance of system;
- Obtain sample from leachate/condensate tank for first quarter 1992 analyses.

Key Personnel Changes:

None

Additional Scope Activities:

None

Current Period Fees:

Fees for the current period are \$12,179.76 (see the attached invoice for task by task costs).

Cumulative Fees:

Cumulative fees are \$217,241.09.

JCK/kml/JVS
[mad-112-101]
15292.03

15292.01
15292.01



MONTHLY PROJECT REPORT

WARZYN INC. One Science Court, Madison, Wisconsin 53705

January 27, 1992

Client: Wisconsin DNR
Environmental Response &
Repair Section
Bureau of Solid & Hazardous
Waste Management
101 South Webster Street
GEF II, SW/3, P.O. Box 7921
Madison, WI 53707

Reporting Month: December 1991
WDNR Project No.: 3144
Re: December 1991 Invoice (#15)
Construction Phase
Services
Refuse Hideaway Landfill
Job 1529206/197

Attention: Ms. Theresa A. Evanson

P.M. Jan C. Kucher, P.E. *JCK*

Monthly Activity Summary:

Project work by Warzyn this month was on the following subtasks:

- System O&M was performed including responding to telemetry alarm calls on December 5, 6, and 11.
- Coordinated leachate/condensate tank pumping.

Work Scope/Budget Changes:

None

Activities for Next Month:

Activities expected to occur over the next month include:

- Continue operation and maintenance of system;
- Obtain sample from leachate/condensate tank for first quarter 1992 analyses (except TCLP).

Key Personnel Changes:

None

Additional Scope Activities:

None

Current Period Fees:

Fees for the current period are \$6,821.10 (see the attached invoice for task by task costs).

Cumulative Fees:

Cumulative fees are \$224,062.19

JCK/ndj/JVS/DFK
[mad-112-101]
1529206/197





Evanson

January 30, 1992

Mr. Steve Dunn
Wisconsin Department of Natural Resources
Bureau of Air Management
P.O. Box 7921
Madison, Wisconsin 53707

Re: 4th Quarter 1991 - (9/1/91 to 12/31/91)
Landfill Gas and Leachate Extraction System
Refuse Hideaway Landfill
Middleton, Wisconsin
Project No. 1529206

Dear Ms. Evanson:

The purpose of this report is to comply with the LAER Operating Requirements under Chapter NR 445, Wisconsin Administrative Code. A copy has been forwarded to the Bureau of Solid and Hazardous Waste Management Section.

Milestones of the Landfill Gas and Leachate Extraction System are summarized as follows:

- Construction Start: October 22, 1990
- Construction Substantial Completion: September 1, 1991
- Gas Extraction System Start-up: July 17, 1991
- Leachate Extraction System Start-up: August 13, 1991
- Gas Testing performed: August 1 and 2, 1991

The average percent operating time for the gas extraction system was approximately 85%.

<u>Month</u>	<u>Percent Operational</u>	<u>Significant Cause for Downtime</u>
September	77%	buried electrical service severed
October	84%	power failures
November	80%	blower maintenance
December	99%	power failures

The average daily temperature after the flame zone was approximately 1500°F.

THE PERFECT BALANCE
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AND CREATIVITY.

MADISON
ONE SCIENCE COURT
P.O. BOX 5385
MADISON, WI 53705
(608) 231-4747
FAX (608) 273-2513



The biweekly measured flowrates of gas in standard cubic feet per minute (scfm) are contained on the flare monitoring table attached.

There were no uncontrolled emissions since the system does not operate without combustion. The Warzyn reports titled Landfill Gas and Leachate Extraction System Construction Documentation Report and Operation and Maintenance Manual (November 1991), may be referenced for more information.

Please call should you have questions or comments.

Sincerely,

WARZYN INC.



Dean R. Free
Project Engineer

Jan C. Kucher, P.E.
Project Manager

DRF/kml/JCK/JDB
[mad-101-160]
1529206/197

Enclosures: Flare Monitoring Table

cc: Theresa Evanson - WDNR Bureau of Solid and Hazardous Waste Management



FLARE MONITORING TABLE

4th Quarter, 1991
Ground Flare Inlet Sample Port

<u>Date</u>	<u>Pressure (in. WC)</u>	<u>Methane (%)</u>	<u>Oxygen (%)</u>	<u>Flow(1) (cfm)</u>	<u>Flow (scfm)</u>	<u>Manual Valve Setting (fraction open)</u>
9/16/91	+4.5	45	0	450	473	3/5
10/3/91	(2)	43	0	(2)	(2)	3/5
10/23/91	+5.0	52	0	475	500	2.5/5
10/30/91	+3.9	52.5	0	420	441	2.5/5
11/7/91	+4.0	52	0	425	446	2.5/5
11/14/91	+4.4	45	0	445	467	2.5/5
11/21/91	+4.5	45	0	450	473	2.5/5
12/5/91		See note (3) below				
12/13/91	+4.0	40	0	425	446	2.5/5
12/27/91	+3.6	40	0	405	425	1.5/5
12/30/91	+3.8	42.5	0	415	435	1.5/5

NOTES:

- (1) Flows have been converted to standard conditions using an estimated average gas temperature of 50°F, standard temperature and pressure of 70°F (530°R) and 406.9 in. H₂O, respectively.
- (2) Brass sample port malfunctioned, replaced with PVC sample port.
- (3) Data unavailable, sample ports inoperable due to icing conditions.

DRF/vlr/JCK
[mad-404-94]
1529206/197

OFFICE COPY

MONTHLY PROJECT REPORT

WARZYN INC. One Science Court, Madison, Wisconsin 53705

February 24, 1992

Client: Wisconsin DNR
Environmental Response &
Repair Section
Bureau of Solid & Hazardous
Waste Management
101 South Webster Street
GEF II, SW/3, P.O. Box 7921
Madison, WI 53707

WDNR Project No.: 3144
Re: January 1992 Invoice (#16)
Construction Phase
Services
Refuse Hideaway Landfill
Job 1529206/197

Attention: Ms. Theresa A. Evanson

P.M. Jan C. Kucher, P.E.

Monthly Activity Summary:

Project work by Warzyn this month was on the following subtasks:

- System O&M was performed including responding to telemetry alarm calls January 3, 4, 5 and 6, 1992.
- Coordinated leachate/condensate tank pumping.
- Performed P.O.E. monitoring.
- Performed leachate/condensate analysis.

Work Scope/Budget Changes:

None

Activities for Next Month:

- Continue operation and maintenance of system;

Key Personnel Changes:

None

Additional Scope Activities:

None

Current Period Fees:

Fees for the current period are \$8,297.43 (see the attached invoice for task by task costs).

Cumulative Fees:

Cumulative fees are \$232,359.62.

JCK/vlr/JVS
[mad-102-185]
1529206/197

1529206/197
JAN 25 1992
WARZYN INC.



March 11, 1992

Ms. Theresa Evanson
Wisconsin Department of Natural Resources
Environmental Response and Repair Section
Bureau of Solid and Hazardous Waste Management
101 South Webster Street, GEF II, SW/3
Madison, Wisconsin 53707

Re: Operation and Maintenance Summary - February 1992
Landfill Gas and Leachate Extraction System
Refuse Hideaway Landfill - Middleton, Wisconsin
Project No. 1529206

Dear Ms. Evanson:

Operation and Maintenance activities performed during this reporting period included the following:

Leachate/condensate hauled (by Al's Modern Sewer Service) to the Madison Metropolitan Sewerage District Treatment Plant as follows:

February 4, 1992	5,000 gallons
February 10, 1992	5,000 gallons
February 17, 1992	5,000 gallons
February 26, 1992	5,000 gallons
February Total:	20,000 gallons
Total to Date:	170,500 gallons

Monitoring of the Landfill Gas and Leachate Extraction System was performed on the following dates:

February 6, 1992
February 13, 1992
February 19, 1992
February 27, 1992

General maintenance of the system this month included replacement of one wellhead sample port, lubricant application to bolts on flare control panel (to prevent corrosion), and lubrication of blower bearings.



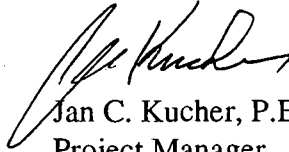
The enclosed tables provide a summary of data collected. Please call should you have questions or comments.

Sincerely,

WARZYN INC.



Dean R. Free
Project Engineer



Jan C. Kucher, P.E.
Project Manager

DRF/ms/JCK/DFK
[mad-103-187]
1529206/197

Enclosure: Gas Well Monitoring Table
Leachate Head Monitoring Table
Gas Probe Monitoring Table
System Alarm Log
Flare Monitoring Table



GAS WELL MONITORING TABLE

Date: 2/27/92

Temperature: 42°F @ 11:00 p.m.

Barometric Pressure: 29.83" Hg Rising

Monitored by: J. Faeth

Gas Detector Model No.: 1939, #6

Serial No.: 905480

Date Last Calibrated: 2/26/92

<u>Well⁽¹⁾</u>	<u>Well Pressure (in. WC)</u>	<u>CH₄⁽²⁾ (%)</u>	<u>O₂ (%)</u>	<u>Valve Setting (fraction Open)</u>	<u>Gas Velocity (fpm)</u>	<u>Gas Flow⁽³⁾ (cfm)</u>	<u>Gas Temperature (°F)</u>
GW1	-1.3	27.5	0	2/13	250	11.2	57.0
GW2	-1.6	10.0	0	2/13	1500	67.5	55.0
GW3	-4.8	42.5	0	5/9	1900	85.5	62.9
GW4	-6.9	57.5	0	5/9	2100	94.5	68.5
GW5	-5.0	57.5	0	5/9	2000	90.0	77.9
GW6	-2.4	35.0	0	3/9	1000	45.0	66.3
GW7	-8.8	55.0	0	4/9	1600	72.0	93.5
GW8(P)	-5.6	55.0	0	3.5/9	1000	45.0	103.6
GW9(P)	-5.5	55.0	0	3.5/9	2400	108.0	100.4
GW10	-4.0	40.0	0	5.5/9	1000	45.0	93.3
GW11(P)	-6.0	57.5	0	4.5/9	2000	90.0	107.6
GW12	-4.4	50.0	0	4.5/9	2100	94.5	103.8
GW13	-4.6	52.5	0	5/9	2000	90.0	85.8

Notes:

- (1) Wells with leachate extraction pumps and controls installed are indicated with a "(P)".
- (2) Percent combustibles by volume, primarily composed of CH₄ (methane).
- (3) Gas flow calculated by multiplying velocity by 0.045 sq. ft (inside cross sectional area of 3-in. dia. pipe).

DRF/ms/JCK/DFK
[mad-404-038]
1529206/197

LEACHATE HEAD MONITORING TABLE

<u>Well</u>	<u>Leachate Head (ft)⁽⁴⁾</u>							
	<u>January 23, 1992</u>				<u>February 27, 1992</u>			
	<u>East Riser</u>	<u>West Riser</u>	<u>North Riser</u>	<u>South Riser</u>	<u>East Riser</u>	<u>West Riser</u>	<u>North Riser</u>	<u>South Riser</u>
GW1	1.1	1.3			1.2	1.3		
GW2	3.1	3.1			3.2	3.1		
GW3	4.2	3.9			4.2	3.9		
GW4	(3)	(3)			(3)	(3)		
GW5	(3)	(3)			(3)	(3)		
GW6	(3)	(3)			(3)	(3)		
GW7	(3)	(3)			(3)	(3)		
GW8(P)	(3)	(3)			(3)	(3)		
GW9(P)			(3)	(3)			(3)	(3)
GW10			6.4	6.0			6.1	5.9
GW11(P)	8.1	(3)			6.7	(3)		
GW12	(3)	11.0			(3)	(3)		
GW13	(3)	(3)			(3)	(3)		

NOTES

- (1) Wells with leachate extraction pumps and controls installed are indicated with a "(P)".
- (2) Leachate extraction system started 8/15/91.
- (3) Leachate head not measurable due to unidentified riser pipe blockage.
- (4) Leachate head measured in 1-in. riser pipes at wells.
Riser pipes are identified as East, West, North or South to indicate location of riser pipe with respect to the well pipe.

DRF/ms/JCK/DFK
[mad-404-038a]
1529206/197

GAS PROBE MONITORING TABLE

2/27/92 Barometric Pressure: 29.83 in. Hg (Rising) at 11:00 a.m.

<u>Probe</u>	<u>Pressure</u> <u>(in. WC)</u>	<u>CH₄⁽¹⁾</u> <u>(%)</u>	<u>CH₄⁽²⁾</u> <u>(% LEL)</u>	<u>O₂</u> <u>(%)</u>
G1-s	-0.1	0	0	21
G1-d	-0.1	0	0	21
G6	-0.1	0	0	21
G8	0	0	0	20.5
G9	-0.1	0	0	21
G10	-0.6	0	0	17.5
GP11-s	-0.1	0	0	20
GP11-d	-0.2	0	0	21
Speedway Buildings	--	0	0	21
GPW1-s	-0.1	0	0	19.5
GPW1-m	0	0	0	19.5
GPW1-d	0	0	0	19.5

Notes

- (1) Percent combustibles by volume, primarily composed of methane (CH₄).
- (2) Percent of the Lower Explosive Limit of methane which is 5% by volume.

DRF/ms/JCK/DFK
[mad-404-038b]
1529206/197

SYSTEM ALARM LOG
February 1992

Alarm Dates

Alarm Cause

Solution

[The Refuse Hideaway Gas and Leachate Extraction System remained in operation 100% of the time during the month of February, 1992 (no alarms were transmitted).]

DRF/ms/JCK/DFK
[mad-404-038c]
1529206/197

FLARE MONITORING TABLE

February 1992
Ground Flare Inlet Sample Port

<u>Date</u>	<u>Pressure</u> <u>(in. WC)</u>	<u>Methane</u> <u>(%)</u>	<u>Oxygen</u> <u>(%)</u>	<u>Flow</u> <u>(cfm)</u>	<u>Flow</u> ⁽¹⁾ <u>(scfm)</u>	<u>Manual</u> <u>Valve Setting</u> <u>(fraction open)</u>	<u>Gas</u> <u>Temperature</u> <u>(°F)</u>
2/6/92	+3.5	47.5	0	400	412	1.5/5	59.0
2/13/92	+4.8	45.0	0	470	486	1.5/5	59.0
2/19/92	+3.0	50.0	0	370	380	1.5/5	60.4
2/27/92	+3.3	47.5	0	390	400	1.5/5	61.3

Notes:

- (1) Flows have been converted to standard conditions using a standard temperature of 70°F (530°R), and standard pressure of 406.9 in. H₂O.

DRF/ms/JCK/DFK
[mad-404-038d]
1529206/197

MONTHLY PROJECT REPORT

WARZYN INC. One Science Court, Madison, Wisconsin 53705

March 13, 1992

Client: Wisconsin DNR
Environmental Response &
Repair Section
Bureau of Solid & Hazardous
Waste Management
101 South Webster Street
GEF II, SW/3, P.O. Box 7921
Madison, WI 53707

WDNR Project No.: 3144
Re: February 1992 Invoice (#17)
Construction Phase
Services
Refuse Hideaway Landfill
Job 1529206/197

Attention: Ms. Theresa A. Evanson

P.M. Jan C. Kucher, P.E. *JK*

Monthly Activity Summary:

Project work by Warzyn this month was on the following subtasks:

- System O&M was performed (no telemetry alarm calls).
- Coordinated leachate/condensate tank pumping.
- Reported P.O.E. monitoring results.
- Reported leachate/condensate analysis results.

Work Scope/Budget Changes:

None

Activities for Next Month:

- Continue operation and maintenance of the system.

Key Personnel Changes:

None

Additional Scope Activities:

None

Current Period Fees:

Fees for the current period are \$4,350.37 (see the attached invoice for task by task costs).

Cumulative Fees:

Cumulative fees are \$236,709.99.

JCK/ccf/DFK
[mad-103-054]
1529206/197



MONTHLY PROJECT REPORT

WARZYN INC. One Science Court, Madison, Wisconsin 53705

April 15, 1992

Client: Wisconsin DNR
Environmental Response &
Repair Section
Bureau of Solid & Hazardous
Waste Management
101 South Webster Street
GEF II, SW/3, P.O. Box 7921
Madison, WI 53707

WDNR Project No.: 3144
Re: March 1992 Invoice (#18)
Construction Phase
Services
Refuse Hideaway Landfill
Job 1529206/197

Attention: Ms. Theresa A. Evanson

P.M. Jan C. Kucher, P.E. JCK

Monthly Activity Summary:

Project work by Warzyn this month was on the following subtasks:

- System O&M was performed.
- Coordinated leachate/condensate tank pumping.

Work Scope/Budget Changes:

None

Activities for Next Month:

- Continue operation and maintenance of the system.

Key Personnel Changes:

None

Additional Scope Activities:

None

Current Period Fees:

Fees for the current period are \$4,514.76 (see the attached invoice for task by task costs).

Cumulative Fees:

Cumulative fees are \$241,224.75.

JCK/ms/DFK
[mad-104-196]
1529206/197

Stamp: Wisconsin Dept. of Natural Resources, Madison, WI, APR 17 1992





MONTHLY PROJECT REPORT

WARZYN INC. One Science Court, Madison, Wisconsin 53705

May 21, 1992

Client: Wisconsin DNR
Environmental Response &
Repair Section
Bureau of Solid & Hazardous
Waste Management
101 South Webster Street
GEF II, SW/3, P.O. Box 7921
Madison, WI 53707

WDNR Project No.: 3144
Re: April 1992 Invoice (#19)
Construction Phase
Services
Refuse Hideaway Landfill
Job 1529206/197

Attention: Ms. Theresa A. Evanson

P.M. Jan C. Kucher, P.E. JCK

Monthly Activity Summary:

Project work by Warzyn this month was on the following subtasks:

- System O&M was performed.
- Coordinated leachate/condensate tank pumping.
- Performed leachate/condensate analysis.
- Coordinated P.O.E. carbon changeout.

Work Scope/Budget Changes:

None

Activities for Next Month:

- Continue operation and maintenance of the system.
- Coordinate with Staff Electric on replacement of pump hour meter at GW11.
- Assemble list of recommended equipment improvements to be made to make ongoing O & M more efficient.

Additional Scope Activities:

None

Current Period Fees:

Fees for the current period are \$5,086.86 (see the attached invoice for task by task costs).

Cumulative Fees:

Cumulative fees are \$246,311.61

DRF/cah/JCK/DFK
[mad-105-188]
1529206/197



MONTHLY PROJECT REPORT

WARZYN INC. One Science Court, Madison, Wisconsin 53705

June 17, 1992

Client: Wisconsin DNR
Environmental Response &
Repair Section
Bureau of Solid & Hazardous
Waste Management
101 South Webster Street
GEF II, SW/3, P.O. Box 7921
Madison, WI 53707

WDNR Project No.: 3144
Re: May 1992 Invoice (#20)
Construction Phase
Services
Refuse Hideaway Landfill
Job 1529206/197

Attention: Ms. Theresa A. Evanson

P.M. Jan C. Kucher, P.E. *JCK*

Monthly Activity Summary:

Project work by Warzyn this month was on the following subtasks:

- System O&M was performed.
- Coordinated leachate/condensate tank pumping.
- Coordinated P.O.E. carbon changeout (Stoppeworth 5-14, Schultz 5-19)

Work Scope/Budget Changes:

None

Activities for Next Month:

- Continue operation and maintenance of the system.
- Monitor P.O.E. systems.
- Report P.O.E. analysis.
- Report results of leachate/condensate analysis.
- Coordinate transition of O&M to ECRs.

Additional Scope Activities:

None

Current Period Fees:

Fees for the current period are \$7,558.75 (see the attached invoice for task by task costs).

Cumulative Fees:

Cumulative fees are \$253,870.36



MONTHLY PROJECT REPORT

WARZYN INC. One Science Court, Madison, Wisconsin 53705

July 27, 1992

Client: Wisconsin DNR
Environmental Response &
Repair Section
Bureau of Solid & Hazardous
Waste Management
101 South Webster Street
GEF II, SW/3, P.O. Box 7921
Madison, WI 53707

WDNR Project No.: 3144
Re: June 1992 Invoice (#21)
Construction Phase Services
Refuse Hideaway Landfill
Job 1529206/197

Attention: Ms. Theresa A. Evanson

P.M. Jan C. Kucher, P.E. JCK

Monthly Activity Summary:

Project work by Warzyn this month was on the following subtasks:

- Coordinated transition of O&M to ECRS.
- System O&M was performed.
- Coordinated leachate/condensate tank pumping.
- Reported results of leachate/condensate analysis.
- Sampled P.O.E. systems (Stoppeworth 6-8, Schultz 6-9).

Work Scope/Budget Changes:

None

Activities for Next Month:

- Report results of P.O.E. analysis.
- Final project closeout.
- Final invoice.

Current Period Fees:

Fees for the current period are \$9,751.60 (see the attached invoice for task by task costs).

Cumulative Fees:

Cumulative fees are \$263,621.96

DRF/ms/JCK/DFK
[mad-107-131]
1529206/197



MONTHLY PROJECT REPORT

WARZYN INC. One Science Court, Madison, Wisconsin 53705

August 25, 1992

Client: Wisconsin DNR
Environmental Response &
Repair Section
Bureau of Solid & Hazardous
Waste Management
101 South Webster Street
GEF II, SW/3, P.O. Box 7921
Madison, WI 53707

WDNR Project No.: 3144
Re: July 1992 Invoice (#22)
Construction Phase Services
Refuse Hideaway Landfill
Job 1529206/197

Attention: Ms. Theresa A. Evanson

P.M. Jan C. Kucher, P.E. *JK*

Monthly Activity Summary:

Project work by Warzyn this month was on the following subtasks:

- Reported results of P.O.E. analysis.
- Final project close out.
- Completed O&M summary for June.

Work Scope/Budget Changes:

None

Activities for Next Month:

None - project complete

Current Period Fees:

Fees for the current period are \$2,546.78 (see the attached invoice for task by task costs).
This is the final invoice.

Cumulative Fees:

Cumulative fees are \$266,168.74
The project was completed below the budget of \$274,489.13.

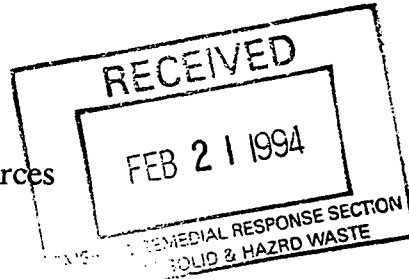
JCK/ms/DFK
[mad-108-162]
1529206/197



February 14, 1994
(301483135/1013-5)

175 N. Corporate Drive
Suite 100
Brookfield, WI 53045
Telephone (414)792-1282
Facsimile (414)792-1310

Ms. Theresa Evanson
Wisconsin Dept. of Natural Resources
101 S. Webster St.
P.O. Box 7921
Madison, WI 53707



RE: Monthly Progress Report and Statement for Consulting Services Provided During January 2 through 29, 1994 for the Refuse Hideaway Landfill RI/FS, Contract #3982

Dear Terry:

Enclosed please find our statement for services provided during January 2 through 29, 1994 on the referenced project.

ACCOMPLISHMENTS

Task 1002. Project Planning

Revisions requested by the WDNR were incorporated into the project Work Plan during this invoice period. The final Work Plan was submitted to the WDNR on January 21, 1994. A progress report summarizing the work completed in December and the financial status was submitted January 12, 1994.

Task 1003. Data Validation

During this invoice period, the M.A. Kuehl Company continued compiling the information required for data validation by the U.S. EPA. Data packages were sent to the U.S. EPA in mid-January. A draft of the QAPTM was forwarded to the WDNR on January 27, 1994.

Task 1005. Data Evaluation

Compilation of existing data continued during this invoice period.

Task 1010. Ground-Water Modeling

Ground-water modeling is continuing with flow calibration and sensitivity analyses.

Task 1013. Project Management

Simon Hydro-Search's cost-tracking and other project management controls were used to monitor the project.

ANTICIPATED PROBLEMS AND RECOMMENDED SOLUTIONS

No problems were experienced during this invoice period.

DOCUMENTS SUBMITTED

- ◆ Monthly Progress Report and Statement for Consulting Services, January 12, 1994
- ◆ Final Work Plan for conducting the Remedial Investigation/Feasibility Study at the Refuse Hideaway Landfill, Middleton, Wisconsin, January 21, 1994
- ◆ Draft Refuse Hideaway Landfill QAPTM, January 27, 1994

PERSONNEL

Personnel involved in the RI/FS activities include project manager Judy Fassbender, hydrogeologist Dave Nader, and senior vice president Michael Noel. Subcontractors include Marcia Kuehl of M.A. Kuehl Company for data validation and Robert Karnauskas of Natural Resource Technologies for technical support. No changes in subcontractors as originally proposed has occurred.

PLANNED ACTIVITIES IN FEBRUARY

WDNR comments will be incorporated into the QAPTM in February. Ground-water modeling will continue with flow calibration and sensitivity analyses which will be completed in mid-February and well field and remedial design work which will start later in February. Data evaluation and preparation of the RI report will continue in February.

SCHEDULE

All work is proceeding on schedule although some minor delays have been experienced in calibration of the model. At this time, the delays are not anticipated to cause difficulties with the work schedule or budget.

The work schedule included in the Work Plan is attached. Target dates for the work schedule adopted as part of the Contract are as follows:

- ◆ Final Work Plan (January 24, 1994, completed),
- ◆ QAPTM, final version, February 22, 1994,
- ◆ Draft RI Report, April 7, 1994,
- ◆ Final RI Report, May 26, 1994,
- ◆ Alternative Array Document, June 9, 1994,
- ◆ Draft Feasibility Study Report, July 28, 1994, and
- ◆ Final Feasibility Study Report, September 1, 1994.


FINANCIAL STATUS

All tasks are proceeding on schedule according to the current authorized budget. Expenditures to date and the percentage of work completed are detailed on the attached table.

I trust this information meets your needs. If you have any questions, please feel free to call.

Sincerely,

SIMON HYDRO-SEARCH

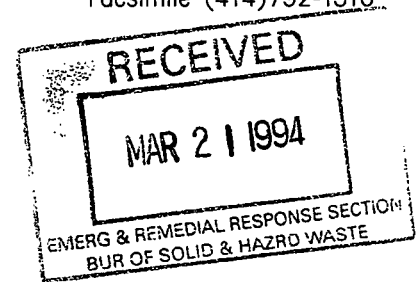

Judy L. Fassbender
Hydrogeologist

JLF:jo
encl.

March 15, 1994
(301483135/1013-6)

175 N. Corporate Drive
Suite 100
Brookfield, WI 53045
Telephone (414)792-1282
Facsimile (414)792-1310

Ms. Theresa Evanson
Wisconsin Dept. of Natural Resources
101 S. Webster St.
P.O. Box 7921
Madison, WI 53707



RE: Monthly Progress Report and Statement for Consulting Services Provided During January 30 through February 26, 1994 for the Refuse Hideaway Landfill RI/FS, Contract #3982

Dear Terry:

Enclosed please find our statement for services provided during January 30 through February 26, 1994 on the referenced project.

ACCOMPLISHMENTS

Task 1002. Project Planning

A progress report summarizing the work completed in January and the financial status was submitted February 14, 1994. Additional scoping refinements for the RI and FS reports were discussed during several phone calls with the WDNR during this invoice period.

Task 1003. Data Validation

During this invoice period, the M.A. Kuehl Company completed compilation of the information required for data validation by the U.S. EPA. Data packages were sent to the U.S. EPA in mid-January. A draft of the QAPTM was forwarded to the WDNR on January 27, 1994. WDNR revisions were incorporated in February and the QAPTM was forwarded to the U.S. EPA.

Task 1005. Data Evaluation

Compilation of existing data for presentation in the RI report continued during this invoice period.

Task 1008. RI Report

Preparation of a draft RI report began in February and will continue through March. The draft RI report will be submitted to the WDNR on April 7, 1994.

Task 1009. Alternative Array Document

Preliminary activities for preparation of an Alternative Array Document began during this invoice period. A draft of the Alternative Array Document will be submitted to the WDNR on June 9, 1994.

Task 1010. Ground-Water Modeling

Ground-water modeling is continuing. Flow calibration and sensitivity analyses were completed in February and early March. Particle tracking and pumping simulation will be initiated in mid-March.

Task 1013. Project Management

Simon Hydro-Search's cost-tracking and other project management controls were used to monitor the project.

ANTICIPATED PROBLEMS AND RECOMMENDED SOLUTIONS

No problems were experienced during this invoice period.

DOCUMENTS SUBMITTED

- ◆ Monthly Progress Report and Statement for Consulting Services, February 14, 1994
- ◆ Refuse Hideaway Landfill QAPTM, February 25, 1994

PERSONNEL

Personnel involved in the RI/FS activities include project manager Judy Fassbender, hydrogeologist Dave Nader, and senior vice president Michael Noel. In March, hydrogeologist Jennifer Ronk will begin assisting with preparation of the RI report and engineer Brian Keller will assist with the Alternative Array Document. Subcontractors include Marcia Kuehl of M.A. Kuehl Company for data validation and Robert Karnauskas of Natural Resource Technologies for technical support. No changes in subcontractors as originally proposed has occurred.

PLANNED ACTIVITIES IN MARCH

U.S. EPA comments will be incorporated into the RI/FS Work Plan in March. Ground-water modeling will continue with particle tracking modeling and well field and remedial design work. Data evaluation and preparation of the RI report will continue in March.

SCHEDULE

All work is proceeding on schedule although some minor delays had previously been experienced in calibration of the model. At this time, the delays are not anticipated to cause difficulties with the work schedule or budget.

Target dates for the work schedule as included in the Work Plan and adopted as part of the Contract are as follows:

- ◆ Work Plan with WDNR Comments (January 24, 1994, completed),
- ◆ QAPTM, final version (February 25, 1994, completed),
- ◆ Final Work Plan with U.S. EPA comments, March 18, 1994,
- ◆ Draft RI Report, April 7, 1994,
- ◆ Final RI Report, May 26, 1994,
- ◆ Alternative Array Document, June 9, 1994,
- ◆ Draft Feasibility Study Report, July 28, 1994, and
- ◆ Final Feasibility Study Report, September 1, 1994.

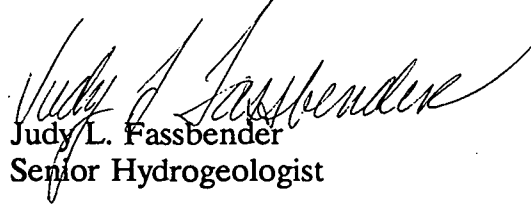
FINANCIAL STATUS

All tasks are proceeding on schedule according to the current authorized budget. Expenditures to date and the percentage of work completed are detailed on the attached table.

I trust this information meets your needs. If you have any questions, please feel free to call.

Sincerely,

SIMON HYDRO-SEARCH



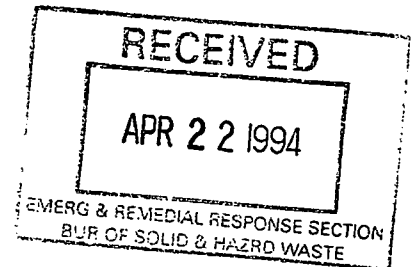
Judy L. Fassbender
Senior Hydrogeologist

JLF:jo
encl.

April 15, 1994
(301483135/1013-7)

175 N. Corporate Drive
Suite 100
Brookfield, WI 53045
Telephone (414)792-1282
Facsimile (414)792-1310

Ms. Theresa Evanson
Wisconsin Dept. of Natural Resources
101 S. Webster St.
P.O. Box 7921
Madison, WI 53707



RE: Monthly Progress Report and Statement for Consulting Services Provided During February 27 through April 2, 1994 for the Refuse Hideaway Landfill RI/FS, Contract #3982

Dear Terry:

Enclosed please find our statement for services provided during February 27 through April 2, 1994 on the referenced project.

ACCOMPLISHMENTS

Task 1002. Project Planning

A progress report summarizing the work completed in January and the financial status was submitted March 15, 1994. U.S. EPA comments on the RI/FS Work Plan were incorporated into the Work Plan text. The revised Work Plan was resubmitted on March 18, 1994. Also, additional scoping refinements for the RI and FS reports were discussed during several phone calls with the WDNR during this invoice period.

Task 1003. Data Validation

During this invoice period, additional information provided by the M.A. Kuehl Company pertaining to the data packages was discussed with the U.S. EPA. The results of the U.S. EPA data validation activities were received in mid-March. Also, validation information provided by the M.A. Kuehl Company and the U.S. EPA was incorporated into the RI report.

Task 1005. Data Evaluation

Compilation of existing data for presentation in the RI report continued during this invoice period.

Task 1008. RI Report

Preparation of the draft RI report continued through March. The draft RI report was submitted to the WDNR on April 11, 1994.

Task 1006. Qualitative Risk Assessment

Preparation of qualitative risk assessment data began in March. The risk assessment is included as a section in the RI report.

Task 1009. Alternative Array Document

Preparation of an Alternative Array Document continued during this invoice period. A meeting was held on April 5, 1994 with the WDNR and the U.S. EPA to discuss the Alternative Array Document-related work completed to date and to define the remaining scope. A draft of the Alternative Array Document will be submitted to the WDNR on June 9, 1994.

Task 1010. Ground-Water Modeling

Ground-water modeling is continuing. Flow calibration and sensitivity analyses were completed in early March. Particle tracking and pumping simulation were initiated in mid-March. Ground-water extraction and injection scenarios have been modeled to determine minimum pumping rates for hydraulic control and possible injection well configurations. Refinement of the pumping and injection simulations will continue into April.

Task 1013. Project Management

Simon Hydro-Search's cost-tracking and other project management controls were used to monitor the project.

ANTICIPATED PROBLEMS AND RECOMMENDED SOLUTIONS

No problems were experienced during this invoice period.

DOCUMENTS SUBMITTED

- ◆ Monthly Progress Report and Statement for Consulting Services, March 15, 1994

- ◆ Refuse Hideaway Landfill Preliminary Ground-Water Modeling Results, March 24, 1994

PERSONNEL

Personnel involved in the RI/FS activities include project manager Judy Fassbender, hydrogeologist Dave Nader, and senior vice president Michael Noel. In March, hydrogeologist Jennifer Ronk will begin assisting with preparation of the RI report and engineer Brian Keller will assist with the Alternative Array Document. Subcontractors include Marcia Kuehl of M.A. Kuehl Company for data validation and Robert Karnauskas of Natural Resource Technologies for technical support. No changes in subcontractors as originally proposed has occurred.

PLANNED ACTIVITIES IN APRIL

The draft RI Report was completed and submitted to the WDNR and the U.S. EPA on April 11, 1994. Ground-water modeling will continue with refinement of particle tracking modeling and well field and remedial design work. Data evaluation and preparation of the Alternative Array Document will continue in April.

SCHEDULE

All work is proceeding on schedule.

Target dates for the work schedule as included in the Work Plan and adopted as part of the Contract are as follows:

- ◆ Work Plan with WDNR Comments (January 24, 1994, completed),
- ◆ QAPTM, final version (February 25, 1994, completed),
- ◆ Final Work Plan with U.S. EPA comments (March 18, 1994, completed),
- ◆ Draft RI Report (April 11, 1994, completed),
- ◆ Final RI Report, May 26, 1994,
- ◆ Alternative Array Document, June 9, 1994,

- ◆ Draft Feasibility Study Report, July 28, 1994, and
- ◆ Final Feasibility Study Report, September 1, 1994.


FINANCIAL STATUS

All tasks are proceeding on schedule according to the current authorized budget. Expenditures to date and the percentage of work completed are detailed on the attached table.

I trust this information meets your needs. If you have any questions, please feel free to call.

Sincerely,

SIMON HYDRO-SEARCH

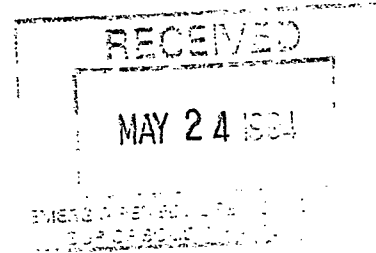

Judy L. Fassbender
Senior Hydrogeologist

JLF:jo
encl.

May 17, 1994
(301483135/1013-8)

175 N. Corporate Drive
Suite 100
Brookfield, WI 53045
Telephone (414)792-1282
Facsimile (414)792-1310

Ms. Theresa Evanson
Wisconsin Dept. of Natural Resources
101 S. Webster St.
P.O. Box 7921
Madison, WI 53707



RE: Monthly Progress Report and Statement for Consulting Services Provided During April 3 through 30, 1994 for the Refuse Hideaway Landfill RI/FS, Contract #3982

Dear Terry:

Enclosed please find our statement for services provided during April 3 through 30, 1994 on the referenced project.

ACCOMPLISHMENTS

Task 1002. Project Planning

A progress report summarizing the work completed in March and the financial status was submitted April 15, 1994. Also, additional scoping refinements for the Alternative Array Document were discussed during several phone calls with the WDNR during this invoice period.

Task 1003. Data Validation

During this invoice period, additional information provided by the M.A. Kuehl Company pertaining to the data validation activities was discussed and incorporated into the RI report.

Task 1005. Data Evaluation

Compilation of existing data for presentation in the Alternative Array Document continued during this invoice period.

Task 1008. RI Report

Preparation of the draft RI report continued into April. The draft RI report was submitted to the WDNR on April 11, 1994.

Task 1009. Alternative Array Document

Preparation of an Alternative Array Document continued during this invoice period. A meeting was held on April 5, 1994 with the WDNR and the U.S. EPA to discuss the Alternative Array Document-related work completed to date and to define the remaining scope. A draft of the Alternative Array Document will be submitted to the WDNR on June 9, 1994.

Task 1010. Ground-Water Modeling

Ground-water modeling is continuing. Results of initial particle tracking and pumping simulation were used to compare modeled versus actual site conditions which resulted in refinements to the model hydraulic parameters. Ground-water extraction and injection scenarios will be modeled to determine minimum pumping rates for hydraulic control and possible injection well configurations. Refinement of the pumping and injection simulations will continue into May.

Task 1013. Project Management

Simon Hydro-Search's cost-tracking and other project management controls were used to monitor the project.

ANTICIPATED PROBLEMS AND RECOMMENDED SOLUTIONS

No problems were experienced during this invoice period.

DOCUMENTS SUBMITTED

- ◆ Monthly Progress Report and Statement for Consulting Services, April 15, 1994
- ◆ Draft Remedial Investigation Report, April 8, 1994

PERSONNEL

Personnel involved in the RI/FS activities include project manager Judy Fassbender, hydrogeologist Dave Nader, and senior vice president Michael Noel. In April, hydrogeologist Jennifer Ronk assisted with preparation of the RI report and engineer Brian Keller assisted with the Alternative Array Document. Subcontractors include Marcia Kuehl

of M.A. Kuehl Company for data validation and Robert Karnauskas of Natural Resource Technologies for technical support. No changes in subcontractors as originally proposed has occurred.

PLANNED ACTIVITIES IN May

The draft RI Report was completed and submitted to the WDNR and the U.S. EPA on April 11, 1994. Ground-water modeling will continue with refinement of particle tracking modeling and well field and remedial design work. Data evaluation and preparation of the Alternative Array Document will continue in May.

SCHEDULE

All work is proceeding on schedule.

Target dates for the work schedule as included in the Work Plan and adopted as part of the Contract are as follows:

- ◆ Work Plan with WDNR Comments (January 24, 1994, completed),
- ◆ QAPTM, final version (February 25, 1994, completed),
- ◆ Final Work Plan with U.S. EPA comments (March 18, 1994, completed),
- ◆ Draft RI Report (April 11, 1994, completed),
- ◆ Final RI Report, May 26, 1994 pending receipt of U.S. EPA and WDNR comments,
- ◆ Alternative Array Document, June 9, 1994,
- ◆ Draft Feasibility Study Report, July 28, 1994, and
- ◆ Final Feasibility Study Report, September 1, 1994.


FINANCIAL STATUS

All tasks are proceeding on schedule according to the current authorized budget. Expenditures to date and the percentage of work completed are detailed on the attached table.

I trust this information meets your needs. If you have any questions, please feel free to call.

Sincerely,

SIMON HYDRO-SEARCH


Judy L. Fassbender
Senior Hydrogeologist

JLF:jo
encl.

HYDRO-SEARCH, INC.

June 15, 1994
(301483135/1013-9)



175 North Corporate Drive
Suite 100
Brookfield, WI 53045
Telephone (414) 792-1282
Facsimile (414) 792-1310

Please Note New Remit To Addr:
Hydro-Search, Inc.
Dept. #861
Denver, CO 80291-0861

Ms. Theresa Evanson
Wisconsin Dept. of Natural Resources
101 S. Webster St.
P.O. Box 7921
Madison, WI 53707

RE: Monthly Progress Report and Statement for Consulting Services Provided During
May 1 through June 4, 1994 for the Refuse Hideaway Landfill RI/FS, Contract
#3982

Dear Terry:

Enclosed please find our statement for services provided during May 1 through June 4, 1994
on the referenced project.

ACCOMPLISHMENTS

Task 1002. Project Planning

A progress report summarizing the work completed in April and the financial status was
submitted May 17, 1994.

Task 1008. RI Report

Revisions to the draft RI report began in May. The draft RI report was submitted to the
WDNR on April 11, 1994 and several figures required revision based on preliminary verbal
comments received from the WDNR.

Task 1009. Alternative Array Document

Preparation of an Alternative Array Document continued during this invoice period. A
draft of the Alternative Array Document will be submitted to the WDNR on June 13, 1994.

Task 1010. Ground-Water Modeling

Ground-water modeling is continuing. Results of initial particle tracking and pumping
simulation were used to compare modeled versus actual site conditions which resulted in
refinements to the model hydraulic parameters. Ground-water extraction and injection
scenarios were modeled to determine minimum pumping rates for hydraulic control and
possible injection well configurations. A draft technical memorandum summarizing the

A Tetra Tech Company

results of the modeling was prepared and submitted for Hydro-Search's internal review by Mary Anderson of the University of Wisconsin-Madison and Dennis Jamison of the Hydro-Search Reno office. The modeling report will be submitted to the WDNR and the U.S. EPA on or before June 24, 1994.

Task 1013. Project Management

Hydro-Search's cost-tracking and other project management controls were used to monitor the project.

ANTICIPATED PROBLEMS AND RECOMMENDED SOLUTIONS

No problems were experienced during this invoice period.

DOCUMENTS SUBMITTED

- ◆ Monthly Progress Report and Statement for Consulting Services, May 17, 1994

PERSONNEL

Personnel involved in the RI/FS activities include project manager Judy Fassbender, hydrogeologist Dave Nader, and senior vice president Michael Noel. Hydrogeologist Jennifer Ronk is assisting with revisions to the RI report and engineer Brian Keller assists with the Alternative Array Document. Subcontractors include Marcia Kuehl of M.A. Kuehl Company for data validation and Robert Karnauskas of Natural Resource Technologies for technical support. No changes in subcontractors as originally proposed has occurred.

PLANNED ACTIVITIES IN JUNE

The Alternative Array Document will be completed and submitted to the WDNR and the U.S. EPA on June 13, 1994. The ground-water modeling technical memorandum will be completed and submitted to the WDNR and the U.S. EPA on or before June 24, 1994. Revisions to the RI Report will be submitted in draft form for WDNR review in late June.

SCHEDULE

All work is proceeding on schedule as discussed with the WDNR.

Target dates for the work schedule as included in the Work Plan and adopted as part of the Contract are as follows:

- ◆ Work Plan with WDNR Comments (January 24, 1994, completed),
- ◆ QAPTM, final version (February 25, 1994, completed),
- ◆ Final Work Plan with U.S. EPA comments (March 18, 1994, completed),
- ◆ Draft RI Report (April 11, 1994, completed),
- ◆ Final RI Report, June 30, 1994
- ◆ Alternative Array Document, June 13, 1994,
- ◆ Draft Feasibility Study Report, July 28, 1994, and
- ◆ Final Feasibility Study Report, September 1, 1994.

FINANCIAL STATUS

All tasks are proceeding on schedule according to the current authorized budget. Expenditures to date and the percentage of work completed are detailed on the attached table.

I trust this information meets your needs. If you have any questions, please feel free to call.

Sincerely,

HYDRO-SEARCH, INC.



for Judy L. Fassbender
Senior Hydrogeologist

JLF:jo
encl.

HYDRO-SEARCH, INC.

HYDRO-SEARCH, INC.

A Tetra Tech Company

July 19, 1994
(301483135/1013-10)

Please Note New Remit To Addr:
Hydro-Search, Inc.
Dept. #861
Denver, CO 80291-0861

Ms. Theresa Evanson
Wisconsin Dept. of Natural Resources
101 S. Webster St.
P.O. Box 7921
Madison, WI 53707

RE: Monthly Progress Report and Statement for Consulting Services Provided During June 5 through July 2, 1994 for the Refuse Hideaway Landfill RI/FS, Contract #3982

Dear Terry:

Enclosed please find our statement for services provided during June 5 through July 2, 1994 on the referenced project.

ACCOMPLISHMENTS

Task 1002. Project Planning

A progress report summarizing the work completed in May and the financial status was submitted June 15, 1994. Additional data was reviewed for incorporation into the RI report following WDNR review of the draft RI report.

Task 1003. Data Validation

Additional data validation clarification was added to the RI report including preparation of a separate data validation section. Tables were revised to include all data qualifiers added during validation activities.

Task 1006. Risk Assessment

Revisions were made to the draft Risk Assessment using the Preliminary Health Assessment for Refuse Hideaway Landfill and U.S. EPA Iris risk based contaminant levels. The Qualitative Risk Assessment completed by the Wisconsin Division of Health for the Sauk County Landfill was also used as a model for presentation format. A second draft of the risk assessment section of the RI report was submitted for WDNR review on June 20, 1994.

Task 1008. RI Report

Revisions to the draft RI report continued in June. Initial comments on the draft RI report were received from the WDNR on May 23, 1994. A second draft of the complete RI report was sent to the agencies on June 27, 1994.

Task 1009. Alternative Array Document

Preparation of an Alternative Array Document continued during this invoice period. The Alternative Array Document was submitted to the WDNR, U.S. EPA, and other agencies as specified by the WDNR on June 13, 1994.

Task 1010. Ground-Water Modeling

A Technical Memorandum summarizing the results of the modeling was prepared and submitted for agency review on June 14, 1994.

Task 1011. Alternative Analysis/FS Report

Review of preliminary discharge limits began and other FS report preparations were initiated.

Task 1013. Project Management

Hydro-Search's cost-tracking and other project management controls were used to monitor the project.

ANTICIPATED PROBLEMS AND RECOMMENDED SOLUTIONS

No problems were experienced during this invoice period.

DOCUMENTS SUBMITTED

- ◆ Alternative Array Document, June 13, 1994
- ◆ Ground-Water Modeling Technical Memorandum, June 14, 1994
- ◆ Monthly Progress Report and Statement for Consulting Services, June 15, 1994
- ◆ Revised Risk Assessment section, June 20, 1994
- ◆ Revised RI Report, June 27, 1994

PERSONNEL

Personnel involved in the RI/FS activities include project manager Judy Fassbender, hydrogeologist Dave Nader, and senior vice president Michael Noel. Hydrogeologist Jennifer Ronk is assisting with revisions to the RI report and engineer Brian Keller assists with the Alternative Array Document.

PLANNED ACTIVITIES IN JULY

Comments on the second draft of the Risk Assessment were received on July 7, 1994. The comments will be incorporated into the final RI Report which will be completed in late July. Agency comments on the Alternative Array Document and ARARs are anticipated during the week of July 18, 1994. Work will continue on the FS as soon as comments are received.

SCHEDULE

All work is proceeding on schedule as discussed with the WDNR.

Target dates for the work schedule as included in the Work Plan and adopted as part of the Contract are as follows:

- ◆ Work Plan with WDNR Comments (January 24, 1994, completed),
- ◆ QAPTM, final version (February 25, 1994, completed),
- ◆ Final Work Plan with U.S. EPA comments (March 18, 1994, completed),
- ◆ Draft RI Report (April 11, 1994, completed),
- ◆ Alternative Array Document (June 13, 1994, completed),
- ◆ Second Draft of RI Report (June 27, 1994, completed),
- ◆ Ground-Water Modeling Technical Memorandum (June 14, 1994, completed),
- ◆ Final RI Report, to be determined based on agency comments,
- ◆ Draft Feasibility Study Report, July 28, 1994, and
- ◆ Final Feasibility Study Report, September 1, 1994.


FINANCIAL STATUS

All tasks are proceeding on schedule according to the current authorized budget. Expenditures to date and the percentage of work completed are detailed on the attached table.

I trust this information meets your needs. If you have any questions, please feel free to call.

Sincerely,

HYDRO-SEARCH, INC.



Judy L. Fassbender
Senior Hydrogeologist

JLF:jo
encl.

August 10, 1994
(301483135/1013-11)



Please Note New Remit To Addr:
Hydro-Search, Inc.
Dept. #861
Denver, CO 80291-0861

Ms. Theresa Evanson
Wisconsin Dept. of Natural Resources
101 S. Webster St.
P.O. Box 7921
Madison, WI 53707

RE: Monthly Progress Report and Statement for Consulting Services Provided During July 3 through 31, 1994 for the Refuse Hideaway Landfill RI/FS, Contract #3982

Dear Terry:

Enclosed please find our statement for services provided during July 3 through 31, 1994 on the referenced project.

ACCOMPLISHMENTS

Task 1002. Project Planning

A progress report summarizing the work completed in May and the financial status was submitted July 19, 1994. Additional data was reviewed for incorporation into the RI report following WDNR review of the draft RI report.

Task 1004. Community Relations

Two representatives from Hydro-Search, Inc. attended the public information meeting in Middleton on July 7, 1994. The purpose of the meeting was to summarize the work completed to date and introduce the remedial alternatives being considered for the site. Hydro-Search was present to assist the WDNR in addressing the public's comments.

Task 1006. Risk Assessment

The WDNR and the Wisconsin Division of Health's comments on the second draft of the risk assessment section of the RI report were reviewed during this invoice period. Based on these comments, revisions will be made to the text during the August invoice period.

Task 1008. RI Report

A second draft of the complete RI report was sent to the agencies on June 27, 1994. Comments on the second draft were received on August 1, 1994. The final RI report will be submitted to the WDNR during the next invoice period.

Task 1010. Ground-Water Modeling

A Technical Memorandum summarizing the results of the modeling was prepared and submitted for agency review on June 14, 1994. WDNR and U.S. EPA comments were received on August 3, 1994. The comments will be addressed during the August invoice period.

Task 1011. Alternative Analysis/FS Report

Review of preliminary discharge limits continued as well as other FS report preparation. Because of the varied treatment requirements for the discharge options, we anticipate that additional funding will be required to complete the FS report. In addition, the draft FS report requires several more weeks to complete. We anticipate submission of the draft FS report on or before August 29, 1994.

Task 1013. Project Management

Hydro-Search's cost-tracking and other project management controls were used to monitor the project.

ANTICIPATED PROBLEMS AND RECOMMENDED SOLUTIONS

No problems were experienced during this invoice period.

DOCUMENTS SUBMITTED

- ◆ Monthly Progress Report and Statement for Consulting Services, July 19, 1994

PERSONNEL

Personnel involved in the RI/FS activities include project manager Judy Fassbender, hydrogeologist Dave Nader, and senior vice president Michael Noel. Hydrogeologist Jennifer Ronk assisted with revisions to the RI report and engineer Brian Keller assisted with the Feasibility Study.

PLANNED ACTIVITIES IN AUGUST

Comments on the second draft of the Risk Assessment and RI Report will be incorporated into the final RI Report which will be completed in late August. Agency comments on the Alternative Array Document and ARARs will be incorporated into the Feasibility Study. The comments on the modeling report will also be addressed.

SCHEDULE

All work is proceeding on schedule as discussed with the WDNR.

Target dates for the work schedule as included in the Work Plan and adopted as part of the Contract are as follows:

- ◆ Work Plan with WDNR Comments (January 24, 1994, completed),
- ◆ QAPTM, final version (February 25, 1994, completed),
- ◆ Final Work Plan with U.S. EPA comments (March 18, 1994, completed),
- ◆ Draft RI Report (April 11, 1994, completed),
- ◆ Alternative Array Document (June 13, 1994, completed),
- ◆ Second Draft of RI Report (June 27, 1994, completed),
- ◆ Ground-Water Modeling Technical Memorandum (June 14, 1994, completed),
- ◆ Final RI Report, August 22, 1994,
- ◆ Draft Feasibility Study Report, August 29, 1994, and
- ◆ Final Feasibility Study Report, to be determined based on agency comments.

FINANCIAL STATUS

All tasks with the exception of the Feasibility Study preparation are proceeding on schedule according to the current authorized budget. It is anticipated that additional funds will be required to complete the Feasibility Study. A cost estimate and change order requesting authorization of contingency funds is attached for your approval. Expenditures to date and the percentage of work completed are detailed on the attached table.

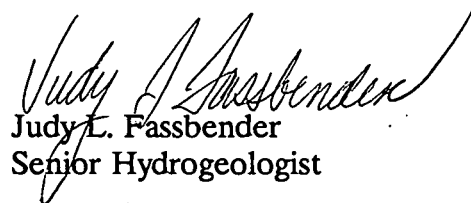
* * * * *

Ms. Theresa Evanson
Wisconsin Dept. of Natural Resources
Page 4

I trust this information meets your needs. If you have any questions, please feel free to call.

Sincerely,

HYDRO-SEARCH, INC.


Judy L. Fassbender
Senior Hydrogeologist

JLF:jo
encl.

September 12, 1994
(301483135/1013-12)

SEP 16 1994

EMERG & REMEDIAL RESPONSE SE
BUR OF SOLID & HAZRD WAST

Ms. Theresa Evanson
Wisconsin Dept. of Natural Resources
101 S. Webster St.
P.O. Box 7921
Madison, WI 53707

RE: Monthly Progress Report and Statement for Consulting Services Provided During August 1 through 28, 1994 for the Refuse Hideaway Landfill RI/FS, Contract #3982

Dear Terry:

Enclosed please find our statement for services provided during August 1 through 28, 1994 on the referenced project.

ACCOMPLISHMENTS

Task 1002. Project Planning

A progress report summarizing the work completed in July and the financial status was submitted August 10, 1994. WDNR and U.S. EPA comments on the modeling report received on August 3, 1994 were addressed in a letter dated August 17, 1994. Review of comments and preparation of the response letter are billed under this task.

Task 1011. Alternative Analysis/FS Report

FS report preparation continued through August and will be completed in mid-September. Because of the varied treatment requirements for the discharge options, additional funding was required to complete the FS report. The change order approving this funding was received on September 7, 1994. We anticipate submission of the draft FS report on September 12, 1994.

Task 1013. Project Management

Hydro-Search's cost-tracking and other project management controls were used to monitor the project.

ANTICIPATED PROBLEMS AND RECOMMENDED SOLUTIONS

No problems were experienced during this invoice period.

DOCUMENTS SUBMITTED

- ◆ Monthly Progress Report and Statement for Consulting Services, August 10, 1994
- ◆ Response to WDNR and U.S. EPA model comments, August 17, 1994

PERSONNEL

Personnel involved in the RI/FS activities include project manager Judy Fassbender, hydrogeologist Dave Nader, and senior vice president Michael Noel. Engineers Brian Keller and Gerald DeMers are preparing the Feasibility Study.

PLANNED ACTIVITIES IN SEPTEMBER

Comments on the second draft of the Risk Assessment and RI Report will be incorporated into the final RI Report which will be completed in early September. Agency comments on the Alternative Array Document and ARARs will be incorporated into the Feasibility Study, which will be submitted to the WDNR on September 12, 1994.

SCHEDULE

All work is proceeding on schedule as discussed with the WDNR.

Target dates for the work schedule as included in the Work Plan and adopted as part of the Contract are as follows:

- ◆ Work Plan with WDNR Comments (January 24, 1994, completed),
- ◆ QAPTM, final version (February 25, 1994, completed),
- ◆ Final Work Plan with U.S. EPA comments (March 18, 1994, completed),
- ◆ Draft RI Report (April 11, 1994, completed),
- ◆ Alternative Array Document (June 13, 1994, completed),
- ◆ Second Draft of RI Report (June 27, 1994, completed),
- ◆ Ground-Water Modeling Technical Memorandum (June 14, 1994, completed),
- ◆ Final RI Report, September 12, 1994,

Ms. Theresa Evanson
Wisconsin Dept. of Natural Resources
Page 3

- ◆ Draft Feasibility Study Report, September 12, 1994, and
- ◆ Final Feasibility Study Report, to be determined based on agency comments.


FINANCIAL STATUS

All tasks are proceeding on schedule according to the current authorized budget. Expenditures to date and the percentage of work completed are detailed on the attached table.

I trust this information meets your needs. If you have any questions, please feel free to call.

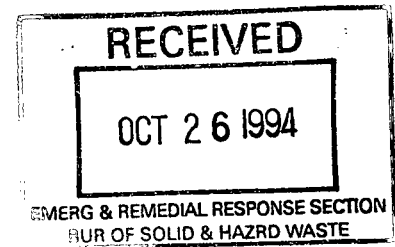
Sincerely,

HYDRO-SEARCH, INC.


Judy L. Fassbender
Senior Hydrogeologist

JLF:jo
encl.

October 13, 1994
(301483135/1013-13)



Ms. Theresa Evanson
Wisconsin Dept. of Natural Resources
101 S. Webster St.
P.O. Box 7921
Madison, WI 53707

RE: Monthly Progress Report and Statement for Consulting Services Provided During August 29 through October 3, 1994 for the Refuse Hideaway Landfill RI/FS, Contract #3982

Dear Terry:

Enclosed please find our statement for services provided during August 29 through October 3, 1994 on the referenced project.

ACCOMPLISHMENTS

Task 1002. Project Planning

A progress report summarizing the work completed in August and the financial status was submitted September 12, 1994.

Task 1006. Qualitative Risk Assessment

WDNR's comments on the Risk Assessment were incorporated into the Remedial Investigation Report and the revised report was forwarded to the WDNR and U.S. EPA on September 13, 1994. This task is complete with this invoice.

Task 1011. Alternative Analysis/FS Report

Feasibility Study (FS) report preparation continued through September and was completed and forwarded to the WDNR and U.S. EPA on September 16, 1994. Additional funding will be required to complete the FS report. One change order approving some additional funding was received on September 7, 1994. An additional change order which reallocates funding remaining from other tasks and requests additional authorization of contingency funding is attached.

Ms. Theresa Evanson
Wisconsin Dept. of Natural Resources
Page 2

Task 1013. Project Management

Hydro-Search's cost-tracking and other project management controls were used to monitor the project. Several conversations were held discussing aspects of the RI/FS with the WDNR.

ANTICIPATED PROBLEMS AND RECOMMENDED SOLUTIONS

No problems were experienced during this invoice period.

DOCUMENTS SUBMITTED

- ◆ Monthly Progress Report and Statement for Consulting Services, September 12, 1994
- ◆ Revised Remedial Investigation Report, September 13, 1994
- ◆ Draft FS, September 16, 1994

PERSONNEL

Personnel involved in the RI/FS activities include project manager Judy Fassbender, hydrogeologist Dave Nader, and senior vice president Michael Noel. Engineers Brian Keller and Gerald DeMers assisted in preparation of the FS.

PLANNED ACTIVITIES IN OCTOBER

WDNR will review the FS in October. HSI will discuss anticipated revisions and additions to the FS as the review progresses. This is to ensure the final FS can be prepared quickly following receipt of WDNR's written comments.

SCHEDULE

All work is proceeding on schedule as discussed with the WDNR.

Target dates for the work schedule as included in the Work Plan and adopted as part of the Contract are as follows:

- ◆ Work Plan with WDNR Comments (January 24, 1994, completed),
- ◆ QAPTM, final version (February 25, 1994, completed),
- ◆ Final Work Plan with U.S. EPA comments (March 18, 1994, completed),
- ◆ Draft RI Report (April 11, 1994, completed),
- ◆ Alternative Array Document (June 13, 1994, completed),
- ◆ Second Draft of RI Report (June 27, 1994, completed),
- ◆ Ground-Water Modeling Technical Memorandum (June 14, 1994, completed),
- ◆ Final RI Report (September 13, 1994),
- ◆ Draft FS Report (September 16, 1994), and
- ◆ Final FS Report, to be determined based on agency comments.

FINANCIAL STATUS

All tasks are complete with the exception of Tasks 1004 - Community Relations, 1011 - Alternative Analysis/FS Report, and 1013 - Project Management. Expenditures to date and the percentage of work completed are detailed on the attached table. Additional funding will be required to complete and finalize the FS Report. Additional funding for the FS Report is required as the result of several items which required more effort than originally anticipated or were beyond the anticipated scope of the project. These items include:

- ◆ incorporation of the requirements of Best Available Technology (BAT) which are economically achievable;
- ◆ evaluation of four surface water discharge locations;
- ◆ development of treatment alternatives for the four sets of water quality standards for surface water discharge;
- ◆ difficulty in identification of a location for an infiltration gallery because few soil types in the area have adequate percolation rates and are located in areas which would not result in direct or indirect discharges to wetlands as required for compliance with NR103;

Ms. Theresa Evanson
Wisconsin Dept. of Natural Resources
Page 4

- ◆ evaluation of potential flooding associated with surface water discharge locations and resulting contacts with the drainage district manager;
- ◆ evaluation of bioenhancement of ground-water remediation with reinjected water. In-situ biological degradation was not considered as an alternative or as part of an alternative because it may generate toxic products such as vinyl chloride and the technology has not been well established. An appropriate way of addressing bioenhancement associated with injection in the FS was addressed in multiple discussions with the WDNR;
- ◆ revisions to cost estimates required with even the slightest change in conceptual design; and
- ◆ incorporation of federal ARAR information following 95% completion of the draft document due to late arrival of ARARs.


From recent discussions with the WDNR, we understand that more information, especially pertaining to qualitative analysis related to various source controls and ground-water extraction, will be required to finalize the document and provide adequate data for the WDNR to formulate the Record of Decision. Other less substantial changes will also be needed. Additional funding will be required to complete this work. A table summarizing the proposed reallocation of remaining funds and authorization of contingency funding is attached. In addition, three copies of a change order form are also attached. If this meets with your approval, please process the required paperwork to approve the funding.

* * * * *

Please do not hesitate to call if you have any questions or required additional clarification.

Sincerely,

HYDRO-SEARCH, INC.


Judy L. Fassbender
Senior Hydrogeologist

JLF:jo
encl.

November 15, 1994
(301483135/1013-14)

Ms. Theresa Evanson
Wisconsin Dept. of Natural Resources
101 S. Webster St.
P.O. Box 7921
Madison, WI 53707

RE: Monthly Progress Report and Statement for Consulting Services Provided During
October 4 through 31, 1994 for the Refuse Hideaway Landfill RI/FS, Contract #3982

Dear Terry:

Enclosed please find our statement for services provided during October 4 through 31, 1994
on the referenced project.

ACCOMPLISHMENTS

Task 1002. Project Planning

A progress report summarizing the work completed in September and the financial status
was submitted October 13, 1994.

Task 1011. Alternative Analysis/FS Report

Incorporation of WDNR's preliminary comments on the Feasibility Study (FS) report began
in October and will continue into November. Additional funding will be required to
complete the FS report. A change order requesting the funding will be forwarded in mid-
November once the review of WDNR and U.S. EPA comments on the draft FS have been
interpreted.

Task 1013. Project Management

Hydro-Search's cost-tracking and other project management controls were used to monitor
the project. Several conversations were held discussing aspects of the RI/FS with the
WDNR.

ANTICIPATED PROBLEMS AND RECOMMENDED SOLUTIONS

No problems were experienced during this invoice period.

DOCUMENTS SUBMITTED

- ◆ Monthly Progress Report and Statement for Consulting Services, October 13, 1994

PERSONNEL

Personnel involved in the RI/FS activities include project manager Judy Fassbender, hydrogeologist Dave Nader, and senior vice president Michael Noel. Engineers Brian Keller and Gerald DeMers are assisting in preparation of the FS.

PLANNED ACTIVITIES IN NOVEMBER

HSI will incorporate the WDNR and U.S. EPA comments into the FS.

SCHEDULE

All work is proceeding on schedule as discussed with the WDNR.

Target dates for the work schedule as included in the Work Plan and adopted as part of the Contract are as follows:

- ◆ Work Plan with WDNR Comments (January 24, 1994, completed),
- ◆ QAPTM, final version (February 25, 1994, completed),
- ◆ Final Work Plan with U.S. EPA comments (March 18, 1994, completed),
- ◆ Draft RI Report (April 11, 1994, completed),
- ◆ Alternative Array Document (June 13, 1994, completed),
- ◆ Second Draft of RI Report (June 27, 1994, completed),
- ◆ Ground-Water Modeling Technical Memorandum (June 14, 1994, completed),
- ◆ Final RI Report (September 13, 1994, completed),

Ms. Theresa Evanson
Wisconsin Dept. of Natural Resources
Page 3

- ◆ Draft FS Report (September 16, 1994, completed), and
- ◆ Final FS Report (November 30, 1994).

FINANCIAL STATUS

All tasks are complete with the exception of Tasks 1004 - Community Relations, 1011 - Alternative Analysis/FS Report, and 1013 - Project Management. Expenditures to date and the percentage of work completed are detailed on the attached table. Additional funding will be required to complete and finalize the FS Report incorporating the WDNR and U.S. EPA's comments.


A change order will be forwarded to the WDNR in mid-November following analysis of the effort involved to complete the FS revisions based on WDNR and U.S. EPA's comments.

* * * * *

Please do not hesitate to call if you have any questions or required additional clarification.

Sincerely,

HYDRO-SEARCH, INC.


Judy L. Fassbender
Senior Hydrogeologist

JLF:jo
encl.

December 15, 1994
(301483135/1013-15)

Ms. Theresa Evanson
Wisconsin Dept. of Natural Resources
101 S. Webster St.
P.O. Box 7921
Madison, WI 53707

RE: Monthly Progress Report and Statement for Consulting Services Provided During November 1 through 28, 1994 for the Refuse Hideaway Landfill RI/FS, Contract #3982

Dear Terry:

Enclosed please find our statement for services provided during November 1 through 28, 1994 on the referenced project.

ACCOMPLISHMENTS

Task 1011. Alternative Analysis/FS Report

Incorporation of WDNR's preliminary comments on the Feasibility Study (FS) report continued through November and into December. The first six sections of the second draft of the FS were forwarded to the WDNR and the U.S. EPA on December 9, 1994. The remaining two sections will be forwarded later this week. Additional funding was requested by Change Order #3 to complete the FS report. The change order is currently pending WDNR approval.

Task 1013. Project Management

Hydro-Search's cost-tracking and other project management controls were used to monitor the project. Several conversations were held discussing aspects of the RI/FS with the WDNR.

ANTICIPATED PROBLEMS AND RECOMMENDED SOLUTIONS

No problems were experienced during this invoice period. Additional funding is required for completion of the second draft and also the final version on the FS as requested by Change Order #3.

DOCUMENTS SUBMITTED

- ◆ Monthly Progress Report and Statement for Consulting Services, November 15, 1994

PERSONNEL

Personnel involved in the RI/FS activities include project manager Judy Fassbender, hydrogeologist Dave Nader, and senior vice president Michael Noel. Engineers Brian Keller and Gerald DeMers are assisting in preparation of the FS.

PLANNED ACTIVITIES IN DECEMBER

HSI will continue to incorporate the WDNR and U.S. EPA comments into the FS to complete the second draft.

SCHEDULE

All work is proceeding on schedule as discussed with the WDNR.

Target dates for the work schedule as included in the Work Plan and adopted as part of the Contract are as follows:

- ◆ Work Plan with WDNR Comments (January 24, 1994, completed),
- ◆ QAPTM, final version (February 25, 1994, completed),
- ◆ Final Work Plan with U.S. EPA comments (March 18, 1994, completed),
- ◆ Draft RI Report (April 11, 1994, completed),
- ◆ Alternative Array Document (June 13, 1994, completed),
- ◆ Second Draft of RI Report (June 27, 1994, completed),
- ◆ Ground-Water Modeling Technical Memorandum (June 14, 1994, completed),
- ◆ Final RI Report (September 13, 1994, completed),
- ◆ Draft FS Report (September 16, 1994, completed),
- ◆ Second Draft FS Report, Sections 1 through 6 (December 12, 1994 completed),

Ms. Theresa Evanson
Wisconsin Dept. of Natural Resources
Page 3

- ◆ Second Draft FS Report, Sections 7 and 8 (December 17, 1994), and
- ◆ Final FS Report (to be determined based on agency comments).

FINANCIAL STATUS

All tasks are complete with the exception of Tasks 1004 - Community Relations and 1013 - Project Management. Expenditures to date and the percentage of work completed are detailed on the attached table. Additional funding will be required to complete and finalize the second draft of the FS report and also the final FS Report incorporating the WDNR and U.S. EPA's comments.


Change Order #3 was forwarded to the WDNR. The request is currently undergoing approval processes by the agency.

* * * * *

Please do not hesitate to call if you have any questions or required additional clarification.

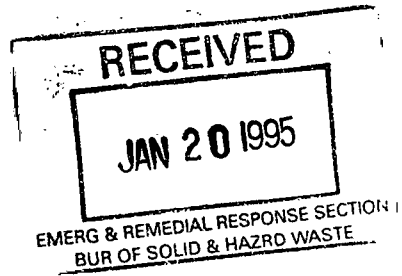
Sincerely,

HYDRO-SEARCH, INC.


Judy L. Fassbender
Senior Hydrogeologist

JLF:jo
encl.

January 16, 1995
(301483135/1013-16)



Ms. Theresa Evanson
Wisconsin Dept. of Natural Resources
101 S. Webster St.
P.O. Box 7921
Madison, WI 53707

RE: Monthly Progress Report and Statement for Consulting Services Provided During November 29, 1994 through January 2, 1995 for the Refuse Hideaway Landfill RI/FS, Contract #3982

Dear Terry:

Enclosed please find our statement for services provided during November 29, 1994 through January 2, 1995 on the referenced project.

ACCOMPLISHMENTS

Task 1013. Project Management

Hydro-Search's cost-tracking and other project management controls were used to monitor the project. Several conversations were held discussing aspects of the RI/FS with the WDNR.

Task 9010. Authorized Contingency Fund

Incorporation of WDNR's preliminary comments on the Feasibility Study (FS) report continued into December. The first six sections of the second draft of the FS were forwarded to the WDNR and the U.S. EPA on December 9, 1994. The remaining two sections were forwarded on December 21, 1994.

ANTICIPATED PROBLEMS AND RECOMMENDED SOLUTIONS

No problems were experienced during this invoice period.

DOCUMENTS SUBMITTED

- ◆ Monthly Progress Report and Statement for Consulting Services, December 15, 1994

PERSONNEL

Personnel involved in the RI/FS activities include project manager Judy Fassbender, hydrogeologist Dave Nader, and senior vice president Michael Noel. Engineers Brian Keller and Gerald DeMers and director of engineering Steven Franks assisted in preparation of the FS.

PLANNED ACTIVITIES IN JANUARY

HSI will incorporate the WDNR and U.S. EPA comments into the FS to finalize the Feasibility Study.

SCHEDULE

All work is proceeding on schedule as discussed with the WDNR.

Target dates for the work schedule as included in the Work Plan and adopted as part of the Contract are as follows:

- ◆ Work Plan with WDNR Comments (January 24, 1994, completed),
- ◆ QAPTM, final version (February 25, 1994, completed),
- ◆ Final Work Plan with U.S. EPA comments (March 18, 1994, completed),
- ◆ Draft RI Report (April 11, 1994, completed),
- ◆ Alternative Array Document (June 13, 1994, completed),
- ◆ Second Draft of RI Report (June 27, 1994, completed),
- ◆ Ground-Water Modeling Technical Memorandum (June 14, 1994, completed),
- ◆ Final RI Report (September 13, 1994, completed),
- ◆ Draft FS Report (September 16, 1994, completed),
- ◆ Second Draft FS Report, Sections 1 through 6 (December 12, 1994 completed),
- ◆ Second Draft FS Report, Sections 7 and 8 (December 21, 1994 completed), and
- ◆ Final FS Report (to be determined based on agency comments).

Ms. Theresa Evanson
Wisconsin Dept. of Natural Resources
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FINANCIAL STATUS

All tasks are complete with the exception of Tasks 1004 - Community Relations and 1013 - Project Management. Expenditures to date and the percentage of work completed are detailed on the attached table. Additional funding was authorized by Change Order #3 to complete the second draft of the FS report and also the final FS Report incorporating the WDNR and U.S. EPA's comments.

Please do not hesitate to call if you have any questions or required additional clarification.

Sincerely,

HYDRO-SEARCH, INC.


Judy L. Fassbender
Senior Hydrogeologist

JLF:jo
encl.

HYDRO-SEARCH, INC.

A Tetra Tech Company

February 15, 1995
(301483135/1013-17)

Ms. Theresa Evanson
Wisconsin Dept. of Natural Resources
101 S. Webster St.
P.O. Box 7921
Madison, WI 53707

RE: Monthly Progress Report and Statement for Consulting Services Provided During January 3 through 30, 1995 for the Refuse Hideaway Landfill RI/FS, Contract #3982

Dear Terry:

Enclosed please find our statement for services provided during January 3 through 30, 1995 on the referenced project.

ACCOMPLISHMENTS

Task 9010. Authorized Contingency Fund

Incorporation of WDNR and U.S. EPA's final comments on the Feasibility Study (FS) report continued through January and were completed on February 2, 1995. The revised FS was submitted to WDNR, U.S. EPA, WDHSS, and the repository of the Middleton public library on February 3, 1995.

ANTICIPATED PROBLEMS AND RECOMMENDED SOLUTIONS

No problems were experienced during this reporting period.

DOCUMENTS SUBMITTED

- ◆ Monthly Progress Report and Statement for Consulting Services, January 16, 1995

PERSONNEL

Personnel involved in the RI/FS activities include project manager Judy Fassbender, hydrogeologist Dave Nader, and senior vice president Michael Noel. Engineers Brian Keller and Gerald DeMers and director of engineering Steven Franks assisted in finalizing the FS.

PLANNED ACTIVITIES IN FEBRUARY

HSI will attend the public meeting scheduled for February 23, 1995 in Middleton to discuss the FS and the WDNR's proposed plan.

SCHEDULE

All work is proceeding on schedule as discussed with the WDNR.

Target dates for the work schedule as included in the Work Plan and adopted as part of the Contract are as follows:

- ◆ Work Plan with WDNR Comments (January 24, 1994, completed),
- ◆ QAPTM, final version (February 25, 1994, completed),
- ◆ Final Work Plan with U.S. EPA comments (March 18, 1994, completed),
- ◆ Draft RI Report (April 11, 1994, completed),
- ◆ Alternative Array Document (June 13, 1994, completed),
- ◆ Second Draft of RI Report (June 27, 1994, completed),
- ◆ Ground-Water Modeling Technical Memorandum (June 14, 1994, completed),
- ◆ Final RI Report (September 13, 1994, completed),
- ◆ Draft FS Report (September 16, 1994, completed),
- ◆ Second Draft FS Report, Sections 1 through 6 (December 12, 1994 completed),
- ◆ Second Draft FS Report, Sections 7 and 8 (December 21, 1994 completed), and
- ◆ Final FS Report (February 3, 1995, completed).

FINANCIAL STATUS

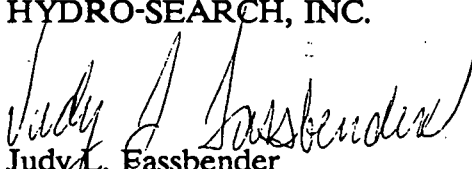
All remaining tasks will be completed within the current authorized budget. No additional funding needs are anticipated to complete the project.

Ms. Theresa Evanson
Wisconsin Dept. of Natural Resources
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Please do not hesitate to call if you have any questions or required additional clarification.

Sincerely,

HYDRO-SEARCH, INC.



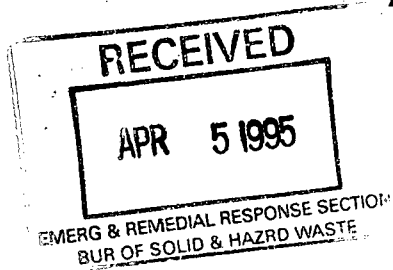
Judy L. Fassbender
Senior Hydrogeologist

JLF:jo
encl.

HYDRO-SEARCH, INC.

A Tetra Tech Company

March 16, 1995
(301483135/1013-18)



Ms. Theresa Evanson
Wisconsin Dept. of Natural Resources
101 S. Webster St.
P.O. Box 7921
Madison, WI 53707

RE: Monthly Progress Report and Statement for Consulting Services Provided During January 31 through February 27, 1995 for the Refuse Hideaway Landfill RI/FS, Contract #3982

Dear Terry:

Enclosed please find our statement for services provided during January 31 through February 27, 1995 on the referenced project.

ACCOMPLISHMENTS

Task 1004. Community Relations

Hydro-Search attended a public meeting on February 23, 1995 and provided additional figures and information as requested by the WDNR during this invoice period.

Task 9010. Authorized Contingency Fund

Incorporation of WDNR and U.S. EPA's final comments on the Feasibility Study (FS) report were completed on February 2, 1995. The revised FS was submitted to WDNR, U.S. EPA, WDHSS, and the repository of the Middleton public library on February 3, 1995.

ANTICIPATED PROBLEMS AND RECOMMENDED SOLUTIONS

No problems were experienced during this reporting period.

DOCUMENTS SUBMITTED

- ◆ Monthly Progress Report and Statement for Consulting Services, February 15, 1995

PERSONNEL

Personnel involved in the RI/FS activities include project manager Judy Fassbender, hydrogeologist Dave Nader, and senior vice president Michael Noel. Engineers Brian Keller and Gerald DeMers and director of engineering Steven Franks assisted in finalizing the FS.

PLANNED ACTIVITIES

No additional activities are planned at this time.

SCHEDULE

All work is proceeding on schedule as discussed with the WDNR.

Target dates for the work schedule as included in the Work Plan and adopted as part of the Contract are as follows:

- ◆ Work Plan with WDNR Comments (January 24, 1994, completed),
- ◆ QAPTM, final version (February 25, 1994, completed),
- ◆ Final Work Plan with U.S. EPA comments (March 18, 1994, completed),
- ◆ Draft RI Report (April 11, 1994, completed),
- ◆ Alternative Array Document (June 13, 1994, completed),
- ◆ Second Draft of RI Report (June 27, 1994, completed),
- ◆ Ground-Water Modeling Technical Memorandum (June 14, 1994, completed),
- ◆ Final RI Report (September 13, 1994, completed),
- ◆ Draft FS Report (September 16, 1994, completed),
- ◆ Second Draft FS Report, Sections 1 through 6 (December 12, 1994 completed),
- ◆ Second Draft FS Report, Sections 7 and 8 (December 21, 1994 completed), and
- ◆ Final FS Report (February 3, 1995, completed).

Ms. Theresa Evanson
Wisconsin Dept. of Natural Resources
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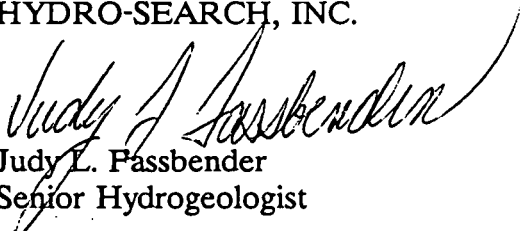
FINANCIAL STATUS

All tasks have been completed within the authorized budget. No additional work is anticipated to complete the project; thus, no additional funds are required.

Please do not hesitate to call if you have any questions or required additional clarification.

Sincerely,

HYDRO-SEARCH, INC.



Judy L. Passbender
Senior Hydrogeologist

JLF:jo
encl.