

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF NEW YORK

UNITED STATES OF AMERICA,
THE STATE OF NEW YORK,

Plaintiffs

- vs -

HOOKEE CHEMICALS & PLASTICS CORP.;
OXY CHEMICAL CORPORATION; HOOKEE CHEMICAL
CORPORATION; OCCIDENTAL PETROLEUM INVESTMENT
CO.; OCCIDENTAL PETROLEUM CORPORATION;
THE TOWN OF LEWISTON; THE TOWN OF NIAGARA,
(HYDE PARK LANDFILL),

Defendants.

AMICI MEMORANDUM AND AFFIDAVIT IN
OPPOSITION TO U.S. MOTION TO WITHDRAW
TESTIMONY AND AFFIDAVIT OF DAVID
BRUCE TWEDELL.

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Amicus Curiae

Dated: January 4, 1982

INTRODUCTION

On November 30, 1981, the United States government submitted a Motion to Withdraw the Testimony and Affidavit of David Bruce Twedell and filed affidavits and a memorandum in support thereof.

After careful review of all documents submitted by the United States, and consideration of the relief requested, Amici unequivocally oppose the withdrawal of Twedell's testimony, since we believe he is highly relevant for purposes set forth within, and its obliteration from the public record would prejudice Amici and the public interest it represents.

In addition, Amici have strongly challenged the bases offered by the federal government as justification for the removal of the testimony, and are frankly offended by the blatant misrepresentations and distortions with respect to Amici's position contained in the Government papers.

We specifically disagree that Twedell's testimony was merely cumulative, and believe that his actual importance during negotiations has been deliberately underplayed by the government in furtherance of the relief requested.

The argument that Twedell's work was merely preliminary since additional experts can be retained to review post-settlement data is irrelevant, in that material defects in the Agreement will never be identified if judicial ratification is given.

The contention of the Government that Twedell's misrepresentation of his qualifications does not affect the substance of the proposed Settlement Agreement ignores Twedell's role as the hydrogeologic advisor to the federal government whose input is clearly reflected in some of the most defective material provisions of the Settlement Agreement.

Perhaps the most untenable argument utilized by the federal government to justify the relief requested is that Twedell's testimony was not materially inconsistent with that of Amici's witnesses.

Amici contend that this argument is intended to lay a groundwork to obscure the connection between the implications of the Twedell incident and the larger related question now before the Court as to whether the Settlement as proposed is viable, adequate and reasonably protective of the public interest.

TWEDELL SOLE EXPERT
IN KEY DISCIPLINE
OF HYDROGEOLOGY:
TESTIMONY NOT CUMULATIVE

The United States government contends that David Bruce Twedell was only one of 21 experts "who participated in the formulation" of the proposed Hyde Park Settlement Agreement. This is patently ridiculous and directly contradicts the testimony of witnesses and representations of Government Counsel during the Hyde Park hearing. (Affidavit of Michael Elder at para. 2, November 27, 1981; affidavit of Lamar Miller at p. 2, para. 5, November 27, 1981.)

It is clear that David Twedell was the sole hydrogeologist for the government negotiating team responsible for evaluation and interpretation of data supplied by Hooker Chemical in the Hyde Park Landfill case, and for technical advice in the formation of a remedial plan. A review of the list of 21 experts submitted by the United States Government on March 17, 1981 in response to the Court's Order of February 12, 1981, reveals that not one "expert" was capable of providing expertise or technical assistance in the field of hydrogeology. (See Chart of Experts by Name and Discipline annexed hereto as Exhibit A.)

As Amici have contended from the outset of these proceedings, an understanding of the hydrogeologic setting at Hyde Park Landfill is necessary to properly design studies which will define the pathways of underground chemical migration, and develop a viable remediation plan. (See Anderson affidavit annexed hereto as Appendix A.)

Although the Government contends that Twedell's input was corroborated and supported by other qualified experts in the State and Federal governments, all other areas of expertise listed include chemistry, engineering, soil science and other miscellaneous disciplines.

Amici submit that if other technical support staff were used to advise the State and Federal governments (as represented in the affidavit of Lamar Miller at p. 2, 3 para. 5(b)) that input was clearly not in the key area of hydrogeology.

Government technical and legal supervisory personnel were obviously not competent to evaluate the adequacy of Twedell's hydrogeologic interpretation and review of Hooker's data, nor to critically evaluate the hydrogeologic viability of the proposed agreement, since:

- 1) the 21 experts named represent almost every scientific field but hydrogeology;
- 2) it is obvious that the 21 experts with whom Twedell worked over 20 months of negotiations were unable to detect his fraud;
- 3) in a series of pre-hearing interviews for preparation of testimony, Government attorneys were apparently unable to discern Twedell's misrepresentations, and in fact relied upon Twedell;
- 4) Charles Morgan, who was primarily responsible for coordination and development of evidence and other data from each of the scientific disciplines needed by the federal government for negotiations and litigation, hired Twedell (T. 9 5-10, T. 143 21-23).

Chuck Morgan, in his testimony, indicated that he specifically included a hydrogeologist on the negotiating team - namely, David Bruce Twedell (T. 220 16-18,21). Morgan indicated that Twedell's role in the negotiations was to use his expertise "to advise us on water flow and types of technologies that could be used to intercept that water flow and collect the contaminated groundwater for treatment..." (T. 221, 3-6).

Morgan advised the Court that the precise role of the team he put together, in conjunction with the State experts, was to independently review the Hooker data, to formulate interpretations (T. 212, 10-16). Morgan in his affidavit acknowledges that Twedell reviewed chemical analysis, well logs, water elevation data, and provided preliminary interpretations of hydrogeologic conditions at the landfill. A major

thrust of the Morgan affidavit is that a multidisciplinary team provided technical advice to EPA and that no significant decisions were made concerning the proposed settlement based solely on Twedell's work product or advice. Yet, since no other member of the negotiating team or any of the supporting State and/or Federal governmental technical staff were competent to render hydrogeologic advice pertaining to the Hyde Park site, decisions were in fact either made in accordance with Twedell's evidence or independent of their hydrogeologic consequences.

It is highly unlikely that any hydrogeologic decisions were made independent of Twedell's counsel since Robert Charles Morgan testified that the most important aspect of his duties involved the integration of all the discreet technological evaluations in the various disciplines including hydrogeology (T. 144 1-8).

EPA DOCUMENTS REVEAL TWEDELL "CRITICAL" TO
HYDE PARK NEGOTIATING TEAM:
GOVERNMENT REPRESENTATION TO COURT IN COMPLETE CONTRADICTION

The Government's attempt to convince this Court that Twedell was just one of many voices advising the government in these proceedings in unequivocally laid to rest by a review of specific EPA documents containing highly relevant information regarding the retainer of David Twedell and the reasons set forth for his selection. (See Memorandum to EPA from Ecology and Environment Inc. July 7, 1981 annexed hereto as Exhibit B). It is clear in Section IV that David Twedell, as sole "geohydrologist" on the negotiating team was deemed to be "critical to the negotiation process in terms of particular expertise and familiarity with the case" and the request was made because he was deemed to be one of the "only people currently qualified to assist the EPA in these particular negotiations" (emphasis provided).

The repetitive incantations of Miller, Morgan and U.S. Counsel in affidavits and memorandum in support of Motion to Withdraw, deny the unique responsibility of Twedell as a primary member of the negotiating team, and insist that EPA in-house staff could and did provide certain of those hydrogeologic functions.

It is interesting that Lamar Miller's affidavit (at p. 2) downplays Twedell's importance and asserts that assistance was provided by Jerry Thornhill in EPA's Ada Oklahoma laboratory, yet Mr. Thornhill is nowhere mentioned in the March 17th, 1981 list, and apparently had no specific involvement, expertise or connection whatever with the Hyde Park site.

The United States' position regarding the ability of EPA staff to provide in-house hydrogeologic assistance is invalidated by an April 1, 1980 memo from F. J. Biros, EPA Hazardous Waste Enforcement Task Force to Paul Nadeau, Environmental Engineer in the Hazardous Waste Site Control

Branch outlining the need for technical support in the Hooker Chemical Co. enforcement negotiations (see Exhibit C annexed hereto). This document provides an excellent background understanding as to why Twedell and other specific individuals were handpicked as critical to the negotiation process. In that memo, Biros specifically states the need of EPA for technical support from "an independent consultant who is expert in the specific hydrogeology and geology of each of the four Niagara County sites" (Hyde Park, S area 102nd Street, and Love Canal, emphasis provided).

In the April 1980 memo, Biros sets forth the hydrogeologic tasks to be undertaken (by Twedell) including attendance at the negotiating sessions, evaluation of site specific hydrogeologic data and information presented by Hooker, assessment of Hooker's proposed remedial measures for site clean up and development of alternative approaches where necessary based on site-specific knowledge "to ensure that clean up measures adequately address agency environmental concerns".

Finally, an additional Biros to Nadeau memo dated July 21, 1980 explained that specific need of EPA for a hydrogeologic assessment of the Hyde Park Landfill site justifies the subcontract cost because "a credible, experienced consultant in geotechnical assessments must be retained..." (see Exhibit D annexed hereto). In each case, David Twedell was selected as the man to do the job.

It is evident from these documents that EPA staff could not provide expert hydrogeologic assistance in the four Hooker enforcement actions, that EPA's need was both critical and urgent, that Twedell was the sole hydrogeologist selected to perform what the Agency obviously determined to be a vital role, and that he was paid substantial fees for performance of extensive duties.

INTEGRITY OF JRB ASSOCIATES, INC. IS
SUSPECT IF EPA CORRECTLY REPRESENTED DATE
OF AGENCY'S FIRST DISCOVERY OF TWEDELL FRAUD

Morgan indicates that he first learned of Twedell's alleged fraud on November 19, 1981 when he received a telephone call from a member of JRB Associates, Inc. Yet Amici are compelled to advise the Court that JRB Associates Inc, was placed on notice as of July 13, 1981 that David Bruce Twedell did not possess a Ph.D. in geology from the University of Houston. (See letter dated July 13, 1981 from Jerry L. Rhodeback, Associate Registrar, University of Houston to Mr. Patrick M. Flanagan, Personnel Manager, JRB Associates, Inc., annexed hereto as Exhibit E).

This letter certifies that Twedell received a Bachelors degree in May of 1979. He was subsequently employed by JRB, and it would have been an academic impossibility for Twedell to have obtained a doctoral degree between May of 1979 and the present. In addition, Twedell's resume incorrectly indicates that he received his doctoral degree in 1979 and a Bachelors degree in 1972. JRB was under an immediate obligation to advise EPA of the situation from that date.

Amici are curious as to whether any EPA personnel were promptly advised of the Twedell situation, and if so whether that occurred prior to the offer of Twedell as a witness at the recent fact finding hearings. It is disturbing to Amici that JRB Associates, which provides 85% of its consulting time to governmental agencies, including Department of Defense, the Army, the Navy (T. 368, 6-9) as well as EPA, may have knowingly and wilfully withheld such material information from its governmental client and permitted Twedell to come forward as a witness in this courtroom.

Amici further wish to direct the Court's attention to the fact that JRB renewed its contract for Twedell's services on November 5, 1981 until December 31, 1981, at least four months after JRB Associates, Inc.

knew that Twedell did not hold a doctoral degree (please see Exhibit F annexed hereto).

TESTIMONY OF DAVID TWEDELL
SUBSTANTIALLY DISPUTED BY AMICI;
TWEDELL'S ADVICE
AS TECHNICAL ADVISOR TO THE UNITED STATES
REFLECTED IN SETTLEMENT AGREEMENT

The United States has asserted (U.S. Memorandum at p. 9) that Twedell's hydrogeological evaluations were merely "preliminary" in nature, and that additional studies to be undertaken pursuant to the agreement will either substantiate or refute advice given by Twedell.

That assertion is absolutely without merit since the agreement reflects the hydrogeologic "opinions" Twedell endorsed in his testimony, which are predicated upon incorrect assumptions, lack of familiarity with accepted hydrogeologic methodology, and which will never be tested by proper studies if that proposed settlement is ratified (Anderson affidavit at p. 5).

Perhaps two of the most important examples of fundamental error and material misrepresentation evident in the opinions offered by Twedell during testimony, which are reflected in the terms of the proposed Settlement Agreement, and which provisions Amici strongly oppose, are briefly set forth in the chart below:

Twedell Testimony	Impact on Agreement	<u>Amici's</u> Position
1. Rochester Shale is impermeable (Twedell, 400 4-11).	No studies required below top of Rochester Shale - only Lockport dolomite and above included within requirement of requisite remedial technology (<u>Amici</u> Post-Hearing Brief at p. 6-8).	Rochester Shale is a major pathway for flow of contaminants beneath landfill site to Niagara River (Anderson affidavit at p. 4, para. 16, and 1522 15-23, 1523, 1-18).
2. The monitoring system is capable of measuring the effectiveness of the bedrock Purge wells in intercepting at least 90% of contaminants migrating below the site (T. 551, 8-22).	The bedrock barrier collection system will be deemed effective if the monitoring wells down-gradient of the Purge wells measure less than 10% of chemical loading calculated to be present in the up-gradient wells. (Agreement Addendum II, pp 6-7, para. J., also <u>Amici</u> Post-Hearing Brief, pp 11-13).	Effectiveness of system cannot be measured since there is no basis of comparison (i.e. no way to measure what percentage of total chemicals escaping from the landfill bottom falls within the zone of influence of the Purge wells). (Anderson 1534 4-15, <u>Amici</u> Post-Hearing Brief, pp 11-13, and 1867 10-23, 1868 1-21).

Other hydrogeologic considerations which neither Twedell nor any government witness addressed, include failure to provide for adequate Gorge remediation, and failure to consider the effect that dilution of contaminants with groundwater in monitoring wells will have upon accurate

remediation measurement. These material omissions have resulted in negotiation of a Settlement proposal which only provides for limited surficial cleanup of the area where Blood Run Creek intersects the Gorge, and a monitoring system which is incapable of discovering any chemical loading into bedrock which either does not fall within the zone of influence of the purge wells or is present in concentrations which fall below the required action level (Amici Post-Hearing Brief pp. 11-13, pp. 16-17).

In addition, the maximum remediation which could be required pursuant to the standard for requisite remedial technology as defined within the four corners of the Agreement renders the deficiencies irreversible if ratification occurs. It is clear that section C(F)(8) at I-19 of the Proposed Settlement does not require studies or remediation below the Lockport dolomite (Amici Post-Hearing Brief at p. 7).

Further, a provision in the Agreement which specifies that Hooker is not responsible for remediation of contamination which has occurred prior to entry of the Agreement or after if the Governmental Parties knew or should have reasonably anticipated the presence of the additional contamination problems, constitutes a complete defense against any further responsibility (Agreement p. 22 (II)(B)(II) p. 23(11)(c), also T. 1840-1841).

Although we cannot speculate what the turn of events would have been if EPA had retained the services of a hydrogeologist in lieu of David Twedell, we believe that a direct correlation exists between Twedell as Witness, Twedell as technical advisor, and the end product, a settlement whose very terms defeat its most basic goals.

It is curious that while the State and Federal negotiating team never, in 20 months, perceived Twedell's lack of capability, Amici were aware from the beginning that:

1) The Governmental parties misunderstood the basic hydrogeology of the site and had clearly failed to make use of and interpret the data provided by Hooker to the maximum extent possible in accordance with accepted hydrogeologic procedures (initial Amici Brief).

2) During cross-examination of Mr. Twedell by Amici, Amici specifically advised this Court that the witness was unable to read data commonly used in the field in order to ascertain sufficiency. This lack of ability was revealed during cross-examination of Twedell regarding raw hydrogeologic data provided by Hooker which Twedell represented he had reviewed for both adequacy and accuracy (T. 491, 492, 530, 534).

Whatever steps EPA now takes to obtain new expert assistance in interpreting data obtained pursuant to the proposed settlement (Miller affidavit p. 4, para. 8), Amici point out that competent hydrogeologic advice as to the adequacy of the bases of the Agreement itself have apparently not been sought.

The directive of Lamar Miller (affidavit at p. 4) that Twedell not be permitted to perform any additional services for EPA in connection with the proposed Settlement is admirable but posthumous. Irrespective of the competence of any future experts enlisted post-settlement, the defects and omissions in the Agreement itself will preclude implementation of proper studies and effective remediation. (See also Anderson affidavit annexed hereto as Appendix A).

The issue here is not whether Twedell has sinned and should be banished from the public payroll, nor whether his testimony in the hearing substantially damaged the case put forward by the Government in support of its position, but rather whether Twedell's input in fact obscured the real issues and impeded the Government's ability to negotiate a competent agreement and to properly protect the public interest.

EVERY MATERIAL OBJECTION TO
THE PROPOSED AGREEMENT
RAISED BY AMICI
REMAINS IN CONTENTION
BETWEEN THE PARTIES AND AMICI

The United States asserts that the withdrawal of the Twedell testimony and affidavit should have no effect on the Court's determination since his testimony is not substantially disputed by Amici.

One thorough reading of the hearing record, including testimony, argument, and written submissions reflect quite clearly the issues in contention and between Parties and Amici. It is our position that if the argument (U.S. memorandum at p. 9) was seriously offered that the testimony of David Twedell "does not differ substantially" from that of Grant Anderson, the federal government is in dire need of competent hydrogeologic advice (Anderson affidavit at p. 2).

It is obvious that the Government diligently searched for those incidental points of agreement in order to avoid an analysis of the substantive validity of Amici's objections to the proposed settlement, and the extent to which they remained unresolved even subsequent to presentation of all relevant government witnesses and submissions of post-hearing documents and oral argument.

Mr. Anderson, in his affidavit annexed hereto as Appendix A, clearly distinguishes the nature and scope of his hydrogeologic evaluation with respect to the Hyde Park site from that undertaken by various governmental and Hooker witnesses, including Kernan Davis, Richard Johnston, Dr. Benjamin Mason and Frank Rovers.

The major issues in contention between Grant Anderson and David Twedell involve the ability of the Rochester shale to transmit water and its ability to serve as a pathway for chemical migration from the landfill and the ability of the monitoring system to quantify contaminants escaping beneath the landfill and measure what amounts,

if any, of contaminants can be recovered under the proposed remediation strategy (see Chart at p.11 herein).

The government represents the primary concerns of Amici during their cross examination of Twedell to be:

- 1) his lack of competence to provide hydrogeologic interpretation of data;
- 2) that Twedell would serve as the primary federal expert in evaluating data accumulated during implementation of the proposed settlement.

The government advises the Court that both concerns have been addressed since the federal government will not permit Twedell to participate further in the Hooker litigation, mootng Amici's challenge to Twedell's expertise.

As explained by Mr. Anderson and discussed herein, once an inadequate agreement is signed, the damage is done. It is not Twedell's incompetence per se which concerns Amici, but rather the obvious relationship between the incompetence of Twedell's technical advice and fundamental provisions in the proposed Settlement Agreement which appear to incorporate Twedell's recommendations.

THE PROPOSED SETTLEMENT DOES NOT PROTECT
PUBLIC HEALTH AND THE ENVIRONMENT
BY ANY SUGGESTED STANDARD OF REVIEW

Amici have discussed in detail what constitutes a proper legal standard for judicial review of the proposed Hyde Park Settlement Agreement in our initial brief submitted to the Court on June 30, 1981 (pp. 14-21).

Although Amici did not cite United States v Ketchikan Pulp Co., 430 F. Supp. 83 (D. Alaska 1977), a lower Court decision cited by the United States in its Memorandum, the standard of review adopted by the Court does not differ significantly from others used by Courts where their determination affects the public interest.

The factual situation in Ketchikan is easily distinguished from the Hyde Park case in that the Ketchikan intervenors tried to prevent ratification of the decree on legal grounds without a specific substantiated claim addressing a fault or inadequacy in the proposed decree, and with no allegation that entry of the decree would subvert the public interest.

Even under the Ketchikan standard, the Court would be hard pressed to ratify the Hyde Park Settlement since Amici have substantiated material defects in the proposed Settlement which precludes implementation of a viable remediation strategy and would clearly subvert the public interest.

However, as the Government is aware, the Hyde Park Settlement incorporates a standard of accomplishing protection of human health and the environment.

The proposal under consideration by the Court protects neither and must therefore be rejected.

TWEDELL TESTIMONY RELEVANT;
WITHDRAWAL WOULD BE INAPPROPRIATE
AND HIGHLY PREJUDICIAL TO AMICI

Amici strongly oppose the Motion to Withdraw the Testimony and Affidavit of David Twedell made by the United States for the following reasons:

1) The evidence given by Twedell is relevant in that the United States government claims that it is entitled to a presumption of agency expertise, and that its witnesses are entitled to "deference and respect" because of their governmental representation (T. 1927, 13-15);

2) It is important that the Court not erase Twedell's existence as a witness and governmental technical advisor from the hearing record. The nature and substance of the opinions rendered by Twedell should be reviewed in the context of the extent to which they are reflected in the Settlement Agreement, and to what degree Twedell's role as a Technical Advisor for the federal government was responsible for material inadequacies which the Court may agree exists in the Agreement.

It is especially important that the court in this case scrutinize the source and nature of Twedell's testimony offered in support of an Agreement which vitally affects a large public interest, especially where Amici have presented an expert hydrogeologist who directly challenged the correctness of major aspects of Twedell's testimony (see Chart on p. above). These criticisms, if accepted by the Court, would require a rejection of the Agreement because of its very provisions which are likely attributable in part, or in whole, to the perjured witness (T.484 2-5).

In civil cases, though courts do grant motions to strike evidence which is incompetent, immaterial or irrelevant and prejudicial (US v Pagan 140 F Supp 711; 60 NYS 2d 453, 270 App. Div. 491, 1946), evidence which is competent for any purpose and relevant to any issue is not stricken by courts (US v 3,544 Acres of Land... 147 F2d 596; In Re Nager's Estate, 258 NYS 2d 760, 1965).

Although Amici found no cases deciding the propriety of a motion to strike testimony which is perjured, either made by witness' counsel or opposing counsel in a civil matter, Twedell's testimony is relevant for the purposes set forth above, and the court should therefore refuse to grant the instant motion to withdraw.

REMEDIES SOUGHT BY AMICI

Amici submit that the relief sought by the United States government in its Motion for Leave to Withdraw the Testimony and Affidavit of David Twedell, and enter the Settlement Agreement as presently constituted should be denied. Amici instead request the Court to grant the following relief:

- . The testimony and affidavit of David Twedell should remain on the hearing record, and should be accorded zero weight as to credibility and substance. The testimony, however, is relevant, since it sets forth the opinions offered by the individual who acted as a hydrogeological advisor to the negotiating team, and provides a measure of the ability with which Hooker's data was scrutinized and remediation strategy developed, against which the substantive objections posed by Amici's hydrogeologist can be weighed.
- . David Bruce Twedell should be recalled to this Court to answer questions regarding disclosures made in chambers by the United States government on November 30, 1981.
- . The Government should formally place on the record all information released in chambers on November 30 regarding fraudulent information submitted by Twedell.
- . Mr. Flanagan of JRB Associates, who as of July 13, 1981, knew that Twedell did not possess a Ph.D. in geology, should be brought before this Court to clarify when JRB informed EPA regarding Twedell's falsified credentials.
- . Most importantly, the Court should disapprove the proposed Agreement as it is currently constituted and should require the modifications recommended by Amici in their post-hearing submission, and as set forth by Mr. Anderson in evidence.

CONCLUSION

For the reasons stated above, and all papers and proceedings had heretofore, Amici respectfully request that the Court disapprove the Settlement as proposed by the Parties, deny the Motion of the United States to Withdraw the Testimony and Affidavit of David Bruce Twedell, and grant the relief requested within.

Respectfully Submitted,

January 5, 1982
Dated:

Barbara Morrison
Barbara Morrison

January 5, 1982
Dated:

Toby Vigod
Toby Vigod

IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF NEW YORK

UNITED STATES OF AMERICA
THE STATE OF NEW YORK

Plaintiffs,

- vs -

Civil Action No. 79-989

HOOKEr CHEMICALS & PLASTICS CORP.;
OXY CHEMICAL CORPORATION; HOOKEr
CHEMICAL CORPORATION; OCCIDENTAL
PETROLEUM INVESTMENT CO.; OCCIDENTAL
PETROLEUM CORPORATION; THE TOWN OF
LEWISTON; THE TOWN OF NIAGARA,
(Hyde Park Landfill)

AFFIDAVIT OF
GRANT ANDERSON

Defendants.

STATE OF NEW YORK)
COUNTY OF ERIE)
CITY OF BUFFALO) ss.

Grant Anderson, being duly sworn, hereby deposes and says that:

1. I have carefully reviewed the Motion to Withdraw and the Memorandum in Support of Motion to Withdraw Testimony and Affidavit of David Bruce Twedell and to Enter the Proposed Judgment and Stipulation Approving Settlement Agreement, submitted to the Court on November 30, 1981 by the United States government.
2. In addition, I have reviewed the testimony of all witnesses who offered hydrogeological evidence during the hearings held in September and October of 1981, with respect to the proposed Hyde Park Settlement agreement.
3. I have always maintained that an understanding of the hydrogeological setting at the Hyde Park Landfill is fundamental to (a) properly designing the types of studies required to assess the pathways of chemicals migrating below the ground surface and (b) determining the best remediation possible subsequent to understanding the hydrogeological setting. (Amici brief).

4. The United States' contention that Twedell's testimony was not substantially disputed by amici is incredible and strongly suggests that the Parties have chosen to deliberately ignore the material issues in contention as delineated in my testimony and amici's post-hearing brief. The United States' memorandum misrepresents the substance and meaning of my testimony, and that offered by Government witnesses, including Twedell.

5. The ability of the shale to transmit water, the rate of movement of chemicals to the Gorge, the ability of the studies contained within the agreement to discover the scope of contamination, and the viability of the remediation strategy itself have been and remain in contention between the parties and amici. Yet the Government memorandum seeks to set forth incidental points of agreement while omitting and obscuring the critical issues which the Court must resolve.

6. The studies under the terms of the agreement will never ferret out the pathways of chemicals migrating from the Hyde Park Landfill and as such the agreement is doomed to failure in achieving its most basic and fundamental goal - to protect public health and the environment.

7. Only two witnesses, Richard Johnston and David Twedell, were proffered as experts in hydrogeology by the Government negotiators. Kernan Davis was offered as a geologist, while Dr. Benjamin Mason was offered as a soil scientist who gave evidence on overburden only.

8. Mr. Johnston was never consulted about the proposed agreement of the Hyde Park Landfill remediation, made no recommendations concerning the settlement agreement prior to the time it was entered, and was not familiar with the Hyde Park site (Johnston 240 10-22).

9. Mr. Davis did not give evidence on any specific geological data with respect to Hyde Park Landfill (Borland 296 10-15) nor did he carry out any calculations on the data that he reviewed in order to assess the adequacy of Hooker's proposals for studies and remediation (Davis 312 1-23 and 313 1-9, 317 1-7). Mr. Davis testified that Hooker's data "merely passed through his hands" (318 15-23) and he did not attempt to estimate at what speed, in what media, and for what period of time contaminants have flowed from the Hyde Park site. In addition, his testimony never addressed the hydrogeologic bases of the remedial provisions contained in the proposed agreement.

10. Dr. Mason confined his expertise and evidence to overburden (soil) and not contaminant flow in the fractured bedrock (Mason 1069 5-15, 905 2-5, 911 1-4). In fact, Dr. Mason acknowledged that he did not have expertise in hydrogeology and relied on other members of the negotiating team (Mason 1111 15-16).

11. Frank Rovers, the engineer who provided most of Hooker's raw data, and who testified at the hearing on Hooker's behalf, has made fundamental errors in his analysis of the hydrogeological setting at Hyde Park. Specifically:

(a) Mr. Rovers testified that he did not believe chemicals could have migrated to the face of the Gorge through the Lockport dolomite (1312 21-23, 1313 1-2), yet my initial calculations showed that chemicals could migrate to the Gorge from the landfill through the bedrock in less than one year (1497 4-16, 1480 5-14 and 1516 2-10);

(b) Mr. Rovers testified that he found no visual or olefactory evidence of chemicals at the Gorge face (1310 11-22). As I testified, there was both visual and olefactory evidence of chemical contamination in the bedrock at the Gorge face during each of my three physical examinations of the Gorge (1486 16 through to 1487 1, 1493 21-23, 1494 1-6, 1495 15-20, 1496 9-18). In my professional opinion, any scientist trained in the discipline of hydrogeology would have recognized this evidence;

(c) Rovers did not recognize that chemicals have migrated through or could migrate vertically through the Rochester shale (1310 16-18) whereas I was also able to calculate an estimated rate and quantity of flow through the Rochester Shale (1509 to 1516, 1519 9-23, 1520 1-22) utilizing shale permeability* data and basic hydrogeologic mathematical principles. In addition, chemical analysis of water and sediment samples which I collected from below the shale revealed the presence of contaminants with fingerprint chemicals from the Hyde Park Landfill.

12. It is my contention that there exists no scientific basis for failing to test the permeability of the Rochester shale with accepted hydrogeologic procedures, and thus assessing the rate and amount of chemical movement vertically downward through the Rochester shale and the underlying rock layers to the Queenston shale, all of which is absolutely critical information in determining proper remediation at the site.

13. My visual, chemical and quantitative analysis all confirm that chemicals have moved through the Rochester shale down to the Queenston shale through vertical fractures in the rock layers (Anderson 1493 2-23, 1494 1-13, 1496 15-18, 1509 to 1516, 1519 9-23, 1520 1-22).

*See para. 22 herein below.

14. None of the parties nor their experts have carried out any field testing or chemical analysis to determine if chemicals have moved or could move through the Rochester Shale (Johnston 237 3-4) (Davis 295 3-10) (Rovers 1304 1-14).

15. The proposed agreement does not require any testing below the Lockport dolomite (Anderson 1521 15-23, 1522 1-10) (Rovers 1304 1-14).

16. As I testified, while the Rochester shale is less permeable than Lockport dolomite, it most definitely has the ability to transmit significant quantities of water through its vertical fractures.

17. Johnston acknowledged under cross-examination that one reason more seepages aren't revealed in the interface between the Lockport dolomite and the Rochester shale is that a short-circuiting occurs, so that water moving toward the Gorge will be intercepted by vertical joints, and move vertically downward into the Rochester shale and below (262 5-7, 18-19).

18. Yet Mr. Davis maintains that the Rochester shale is very, very impervious (295 3-10) even though, under cross-examination, he admits that he has no data or measurements on which to base his conclusions (295 6-8). In direct contradiction, Mr. Davis reiterates the need for more data, exacting standards, precise measurements and accuracy (Davis 313 8-10, 316 4-6, 317 11, 320 5-6) when describing why he cannot calculate the velocity of water and quantity of water moving in the Lockport dolomite. In fact, Mr. Davis indicates that he needs pumping test and observation well readings (309 18-22) to determine velocity and quantity of flow. And it is precisely this same data that will never be obtained for the Rochester shale under the terms of the Agreement (Rovers 1304 1-14) (Anderson 1521, 15-23, 1522 1-10).

19. Yet, Davis did of course agree with Mr. Johnston (295 10-12) when Johnston stated that all of the rock down to the Queenston shale increased in permeability at some unknown point back from the Gorge (245 12-23, 246 1-11).

20. Although both Johnston and Davis lacked specific information as to where the bedrock becomes more permeable as one approaches the face of the Gorge (Johnston 246 7-11, Davis 291 13-16), the agreement clearly omits the requirement for any assessment of this obvious pathway for deep chemical migrations, and as such the agreement precludes accurate delineation of the chemical plume or proper remediation (Amici post-hearing brief pp 6-8).

21. The United States (Memorandum at p. 13* footnote) has misrepresented my testimony regarding the significance of permeability testing in the Rochester shale which I completed in thirteen locations near Welland, Ontario.

These tests were not carried out near the face of the Niagara Escarpment, but rather at a distance of 4,000 feet from the escarpment. That is more than twice the distance between Hyde Park Landfill and the Niagara Gorge.

22. There is a regional hydrogeological character to the Rochester shale across the Niagara plain on both sides of the border. The permeability of the shale is essentially identical at equi-distant locations moving back from either the escarpment (Canadian) or the Gorge (American).

23. As a basic hydrogeological matter, my utilization of a permeability factor for Rochester shale measured through field tests performed 4,000 feet from the escarpment to estimate the water flowing capacity of Rochester shale at 2,000 feet from the Niagara Gorge (i.e. at Hyde Park Landfill) allows a significant safety factor, since the permeability of the shale measured near Welland would be as low or likely lower than that beneath Hyde Park Landfill (Anderson 1519 13-23, 1520 1-10, 15-22).

24. The United States acknowledges that Twedell was the only hydrogeologist who represented the federal government in negotiating sessions with Hooker (United States Memorandum at 7). The assurance that Twedell's interpretations of hydrogeological data were consistent with the opinions of other experts should not be considered seriously by the Court since not one of the twenty-one experts cited by the federal government, some of whom had only nominal involvement with this case, was qualified in Twedell's purported field - that of hydrogeology (please see Exhibit A annexed hereto).

25. The United States offer (affidavit of Lamar Miller at p. 4) to replace Mr. Twedell with competent and qualified experts on hazardous waste containment technology and hydrogeology to aid in evaluating further data collected pursuant to the proposed settlement completely ignores the problem that the Government negotiating team was devoid of competent hydrogeologic advice, and therefore decisions were reached without a clear understanding of the hydrogeologic consequences.

26. Given that the studies proposed in the agreement (for problem definition and monitoring) are fundamentally defective, entry of the agreement will render any competent hydrogeologist retained in the future completely helpless in achieving protection of public health and the environment.

27. In the course of carrying out my hydrogeological analysis of the Hyde Park Landfill contamination problem, I expended approximately 1,000 hours exclusive of support staff and chemical laboratory time. In the course of my evaluation, I visited the site and physically examined the Gorge face three times between August and October of 1981. In addition, I specifically analyzed all available raw data and was apparently the only expert to utilize that data for calculations which allowed me to decipher the pathways and distances travelled by the contaminants. In this case, all paths (with insignificant exception) lead into the Niagara River and Lake Ontario.

28. For all the reasons stated above, I again strongly believe that the Court must disapprove the proposed settlement agreement as constituted.

Sworn to Before me
on this 4th day of January, 1982

Barbara Morrison

NOTARY

Grant Anderson

GRANT ANDERSON

BARBARA MORRISON
Notary Public State of New York
Qualified in New York
Notary Public Expires March 12, 1983

CHART OF EXPERT NAME AND DISCIPLINE OF MOST ADVANCED DEGREE

NAME	HIGHEST DEGREE	FIELD			
		ENGINEERING	CHEMISTRY	BIOLOGY OR HEALTH SCIENCES	OTHER
David Bruce Twedell	B.A.				X Physical Science
LaMar Miller	Ph.D.		X		
Robert Charles Morgan	M.S.				X Veterinary Bacteriology
Benjamin Mason	Ph.D.				X Soil Science
Vilma R. Hunt	Masters				X Physical Anthropology
Roger S. Cortesi	Ph.D.				X Physics
Russell H. Wyer	B.S.	X (Civil)			
William J. Librizzi	Masters	X			
Frode Ulvedal	Ph.D.			X (Physiology)	
Paul E. dos Rosiers	Masters	X (Civil)			
Kevin Michael Burger	B.S.				
David J. Cesareo	Masters	X			

NAME	HIGHEST DEGREE	FIELD			
		ENGINEERING	CHEMISTRY	BIOLOGY OR HEALTH SCIENCES	OTHER
Joseph P. LaFornara	Ph.D.		X (Inorganic)		
Gordon R. Olson	Masters				X Public Administration
Charles Plost	Masters			X (Biochemistry)	
Charalingayya B. Hiremath	Ph.D.			X (Biochemistry)	
Michael A. Kilpatrick	B.S.	X (Chemical)			
Bernard F. Dudenbostel	Ph.D.		X (Physical)		
Robert C. Koch	B.S.	X			
Roger S. Wetzel	B.S.	X (Civil)			
Sidney F. Paige	MPH			X (Environmental Health)	
TOTAL	21	7	3	4	6

ecology and environment, inc.

ROSSLYN CENTER, 1700 NORTH MOORE ST., ARLINGTON, VA. 22203, TEL. 703-521-1705

International Specialists in the Environmental Sciences

Date: July 7, 1981

To: Environmental Protection Agency

From: Ecology and Environment, Inc.
FIT NPMO

Subject: Request for Additional Senior Technical
Support - Hooker Negotiations.
TDD HQ-8010-3, 3A & 3B

I. Summary

The attached TDD HQ-8010-3B requests that the technical support to the Hooker Chemical and Plastics Corporation negotiations be extended from 30 June 1981 to 30 September 1981. In addition, this TDD requests the total authorized dollars be increased by \$50,000 from a total of \$177,700 to a total of \$227,700.

II. Background

The initial subcontract request, TDD HQ-8010-3 resulted in three subcontracts totalling \$95,200, one to JBF Scientific Corporation for \$43,200, one to Geomet Technologies for \$27,000, and one to JRB Associates for \$25,000. These subcontracts were approved by the Contracting Officer 20 November 1980.

A request for subcontract extension was received via TDD HQ-8101-3A and resulted in a \$82,500 increase to this effort, bringing the total dollars to \$177,700 and the respective subcontract totals to \$89,200 for JBF, \$37,000 for Geomet, and \$51,500 for JRB. This additional request was approved by the Contracting Officer on 2 December 1981.

From November 1980 to the present time a total of \$148,423 has been invoiced against the \$177,700 authorized as follows: JBF - \$63,835, Geomet - \$35,974, and JRB - \$48,614. During this period the following people, plus their respective support staffs, have been utilized as expert consultants/witnesses:

<u>Company</u>	<u>Name</u>	<u>Title</u>
JBF	Dr. Sam Fogel	Chemist
JBF	Jaret C. Johnson	Civil Engineer
JRB	Dr. D. Twadell	Geohydrologist
Geomet	Dr. B.J. Mason	Soil Scientist

Exhibit B

III. Conclusion

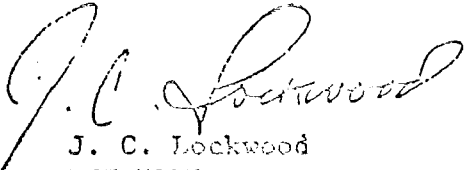
The current EOD requests the extended effort of 3 of the 4 experts set out above through 31 September 1981. EPA enforcement has requested we authorize 500 additional hours each for Dr. Mason, Dr. Twedell and Dr. Fogel. At the current rates charged for these services, 500 additional hours per man entails a total of \$66,900 in labor costs. Since \$29,277 remains to be funded against the previous approvals, the difference is \$37,623. The EPA project office has placed a limit of NTE \$50,000 for this additional effort, to include travel. Consequently the three subcontract requests should involve closing out the previous subcontracts at their current \$148,423 level and issuing new subcontracts totalling \$79,277 (\$66,900 for labor and \$12,377 for travel) for a new total authorized effort of \$227,700. The \$66,900 for labor and \$12,377 in travel would be distributed as follows:

<u>Name</u>	<u>Labor</u>	<u>Travel</u>
S. Fogel	\$23,500	\$2,000
B.J. Mason	\$25,000	\$2,000
D. Twedell	\$18,400	\$2,000
Total	\$66,900	\$6,000*

* The difference between \$12,377 and \$6,000 will be reserved until it is certain that no further invoices are outstanding against current subcontracts.

IV. Sole Source

This request represents a continuation of ongoing enforcement effort using people who are the only people currently qualified to assist the EPA in these particular negotiations, since all three experts have been and continue to be critical to the negotiation process in terms of particular expertise and familiarity with the case.


J. C. Lockwood
FRT NPMO

Approval

Region NPMO RAN

Q-8010-3B

Subject/Description: Negotiations, Sr. Tech

Support and Expert With

NOTE

Attached request has been received from Region HQ TDD No. HQ-80

has been signed by L. Welzel and S. Fredericks
EAE EPA

an estimated completion date of 30 September 1981

Estimated cost for this effort is \$ 50,000* Suggest

Contractors are S. Fogel; B. Mason; D. Twadell

Option

*Bringing total authorized to \$227,700

NPMO approves this request, it will be forwarded to the EPA CO and

appropriate. If EPA approval is granted, this document will be forward

responsible for Region NPMO for processing, negotiation and/or

administration as required.

James C. Lockwood
RAN Signature

7 July 1981

Date

Region

EAE/NPMO

Name

Date

Comments:

R. Frank (over \$10,000 cost
type or \$25,000 fixed price)

R. Gray

8 JULY 81

APPROVED

L. Welzel

8 JULY 81

APPROVED

N/A

R. King

D. EPA

Name

Date

Comments:

EPA PO (if over \$1000)

9 JULY 81

APPROVED

EPA CO (if over \$10,000 cost
type or \$25,000 fixed price)

Attachments:

1. TDD (must be signed and dated)
2. Memo NPMO to EPA 7 July 1981
3. Previous Subcontract Approval Sheets

Approval

A. ESE/NPHO

Name

Date

Comments:

X

Ron Frank

(over \$10,000 cost type
or \$25,000 fixed price)

X

Roger J. Gray
R. Gray

11/20/80

approved

11/20/80

X

J. F. Lasker
L. Helzel

11/19/80

for

P/A

R. Xing

B. EPA

Name

Date

Comments:

X

EPA PO

(if over \$1,000)

X

Pat Patterson
EPA CO

21 Nov. 1980

* See at

(if over \$10,000 cost
type or \$25,000 fixed
prices)

conditions

* Approval is granted subject to satisfaction of
following conditions/requirements:

(A) the costs for utilizing the consultant to
be paid out of the LDC budget/subcontract
subelement; and

(B) the fees associated with per diem and
in the O&B Scientific proposal will be dele
and as I said

20 November 1980

Site Location: Hooker Chemical - R)
Corp.

See Approval

Subject/Description: Senior technical support
expert witness for EPA
Force negotiations re:
Niagara Falls Plant

to: FIT NPMO

to: HQ-8010-3

Summary

The attached request has been received from EPA Headquarters, HQ-8010-3, and has been signed by Roger Gray (EPA) and Paul Hadeau (EPA) and has an estimated completion date of 31 January, 1981.

Total estimated cost for this effort is \$95,000. Suggested contractors are: JBF, JRB, and Geomet.

Discussion

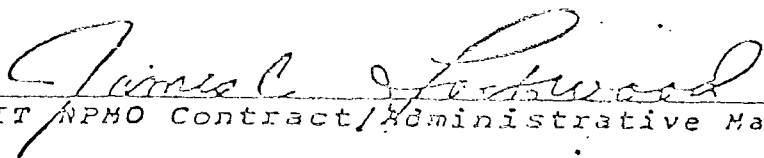
On October 28, 1980, this office submitted a package, EFCL80-10-014, containing a letter describing the people requested by the Task force for subject effort along with their respective rates, estimated travel cost, appropriate resumes. TDD HQ-8010-3 was also inclosed.

This package is intended to provide you with the additional information in III below, and to provide a vehicle for obtaining the appropriate approval signatures.

All three companies in question have Government approved labor rates. I have attached company letters indicating the appropriate audit information.

Attachments

- 1 - JBF letter from Farrell to Welzel dated 29 October, 1980.
- 2 - Geomet letter from Lyon to Lockwood dated 3 November, 1980.
- 3 - JRB letter from Hoyt to Lockwood dated 11 November, 1980.
- 4 - Proposed JBF subcontract
- 5 - Proposed Geomet subcontract
- 6 - Proposed JRB subcontract
- 7 - Standard General Terms to accompany each subcontract


FIT NPMO Contract/Administrative Manager
20 November 1980
Date

* Labor ^{Hours} costs will be accumulated against E&E LOE pools -
~~not subcontract pools~~



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

APR 1 1980

OFFICE OF ENFORCEMENT

SUBJECT: Technical Support for Hooker Chemical Co.
Enforcement Negotiations.

FROM: F. J. Biros *FJB*
Hazardous Waste Enforcement Task Force

TO: Paul Nadeau, Environmental Engineer
Hazardous Waste Site Control Branch

The Hazardous Waste Enforcement Task Force and Region II staffs are in the process of negotiating settlements with the Hooker Chemical Co. concerning four hazardous waste sites in Niagara County, New York. Civil actions were filed by EPA on December 20, 1979 respecting Love Canal Landfill, "S" area Landfill, 102nd Street Landfill and Hyde Park Landfill. Because of the scope of these cases and their relationship to enforcement actions involving Hooker Chemical Co. in other states, the Task Force has taken an active role in pursuing settlement actions as part of its nationally managed case program.

Negotiations with Hooker Chemical were initiated in February, 1980 and meetings are currently scheduled on a frequent basis. During the pendency of the negotiations, EPA is in need of technical support from an independent consultant who is expert in the specific hydrology and geology of each of the four Niagara County sites. The consultant will be required to attend negotiation sessions between EPA and Hooker Chemical Co. and provide advice and consultation to EPA concerning site-specific hydrology and geology data and information presented by the company. In addition, in certain instances a formal report analyzing company submitted information will be required at the direction of EPA task manager. The consultant will be required to assess and evaluate company proposed remedial measures for site cleanup and where necessary, suggest alternative approaches based on site specific knowledge to ensure that cleanup measures adequately address Agency environmental concerns.

Because negotiations are now in progress under a judicially imposed timetable, we request immediate technical support response through the now instituted FIT contract system. A sub-contract mechanism to acquire the necessary technical support may be appropriate, since Ecology & Environment, Inc. technical staff is not yet on board.

We appreciate your quick response to this request. Please contact me on 426-8710 regarding further details of this request.

Exhibit C

DIRECTIVE OF WORK FOR JRB ASSOCIATES, INC.

TOPIC: Technical Support for EPA Enforcement Action

INTRODUCTION: In support of EPA's enforcement effort against Hooker Chemical Company, it is necessary to have expert technical support on a "quick response" basis. JRB is especially well-suited for this work for a number of reasons. They are familiar with the Niagara Falls area and have visited the sites in question. The RA design and costing for this case was done by JRB and there have been active participants in EPA's negotiations with Hooker Chemical. The purpose of this work order is to provide the EPA's Hazardous Waste Enforcement Task Force with the necessary technical support that it needs for its enforcement case.

SCOPE: This work order will consist of the following:

In conjunction with their previous work for the Hazardous Waste Enforcement Task Force, JRB will supply senior level technical support for on-going legal negotiations with Hooker Chemical Company. JRB will be required to present and defend all remedial action design and costing work performed by them, as well as evaluate counter proposals for remedial actions presented by Hooker. This work will include supplying EPA with all maps, drawings, and other graphic presentation as needed. In the event EPA is required to appear in court on any of the abovementioned work, JRB will supply as necessary, expert witness assistance to EPA's legal case, in support of all work performed by JRB.

NAME OF CONTRACTOR

SRB Associates, Inc.

HOME OFFICE ADDRESS

3400 Westpark Drive
McLean, Virginia 22102

DETAILED DESCRIPTION OF SERVICES TO BE FURNISHED

Technical Support for EPA Enforcement Actions

DIVISION(S) AND LOCATION(S) WHERE WORK IS TO BE PERFORMED

800 - McLean

TOTAL AMOUNT OF PROPOSAL

11,596.84

GOVT SOLICITATION NO.

DETAIL DESCRIPTION OF COST ELEMENTS

1. DIRECT MATERIAL (Itemize on Exhibit A)	EST COST (\$)	TOTAL EST COST	DIFFERENTIAL
a. PURCHASED PARTS			
b. SUBCONTRACTED ITEMS			
c. OTHER (1) RAW MATERIAL			
(2) YOUR STANDARD COMMERCIAL ITEMS			
(3) INTERDISCIPLINARY TRANSFERS (At other than cost)			
TOTAL DIRECT MATERIAL			
2. MATERIAL OVERHEAD* (Rate %NS base)			
3. DIRECT LABOR (Specify)	ESTIMATED HOURS	RATE/HOUR	EST COST (\$)
Senior Scientist IVb	300	14.46	\$4338.00
Secretarial Ic	40	5.816	232.64
TOTAL LABOR			4570.64
4. LABOR OVERHEAD (Specify Department or Cost Center)	O.H. RATE	% BASE	EST COST (\$)
Fringe rate	.52	4570.64	1462.60
Overhead rate	.60	4570.64	2742.38
TOTAL LABOR OVERHEAD			4204.98
5. SPECIAL TESTING (Including field work at Government installations)		EST COST (\$)	
TOTAL SPECIAL TESTING			
6. SPECIAL EQUIPMENT (If direct charge) (Itemize on Exhibit A)		EST COST (\$)	
7. TRAVEL (If direct charge) (Give details on attached Schedule)		EST COST (\$)	
a. TRANSPORTATION		226.00	Ex "A"
b. PER DIEM OR SUBSISTENCE			
TOTAL TRAVEL		226.00	
8. CONSULTANTS (Identify—purpose—rate)		EST COST (\$)	
TOTAL CONSULTANTS			
9. OTHER DIRECT COSTS (Itemize on Exhibit A)			411.40
10. TOTAL DIRECT COST AND OVERHEAD			9413.02
1. GENERAL AND ADMINISTRATIVE EXPENSE (Rate 12 % of cost element Nos. 1-9)			1129.56
2. TOTALITIES			
13. TOTAL ESTIMATED COST			10,542.58
14. FEE OR PROFIT 10%			1054.26
15. TOTAL ESTIMATED COST AND FEE OR PROFIT			11,596.84

OPTIONAL FORM 40 (10-71)



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF ENFORCEMENT

JUL 21 1980

MEMORANDUM

SUBJECT: Technical Support for Enforcement Actions Respecting
Hooker Chemical Corp. in Niagara County, N.Y.

FROM: Francis J. Biros
Hazardous Waste Enforcement Task Force

TO: Paul Nadeau,
Project Officer, FIT Contract
Hazardous Waste Site Control Branch OWPO

Attached are documents requesting FIT support for the subject enforcement actions. Enforcement actions respecting the Hooker Chemical Corp. Hyde Park and Love Canal sites are nationally managed cases handled through the Hazardous Waste Enforcement Task Force. TDDs and other documents for the following tasks are included.

- 1) Geotechnical Site Assessment of Hyde Park Landfill.
(Subcontract) -- Note that site access must be arranged through the Hazardous Waste Enforcement Task Force, Project Manager -- Chuck Morgan.
- 2) Survey of DOD activities in Niagara County, N.Y. (FIT task),
Project Manager -- F. J. Biros.

We request expeditious handling of these tasks as the information is essential to prepare for negotiation sessions and court hearings scheduled in July 1980. We appreciate your quick response to this technical support request. If you require any additional information, please contact me.

Attachment

cc: Lamar Miller

SUBCONTRACT SCOPE OF WORK

1. Contract Title

Geotechnical Site Assessment of Hyde Park Landfill

2. Period of Performance

Effective ASAP and lasting through approximately August 1, 1980.

3. Project Manager

Chuck Morgan (EN-335)
U.S. Environmental Protection Agency
Hazardous Waste Enforcement Task Force
401 M Street, S.W.
Washington, DC 20460
(202) 755-0940

4. Statement of Work

Hooker Chemical Corp. disposed of more than 80,000 tons of chemical waste at the Hyde Park Landfill from 1953 to 1975. Migration of wastes from the site has been noted since 1964. Hooker disposed of wastes at the landfill by dumping truckloads of drummed or liquid wastes into open pits, followed by backfilling the area. Pollutant migration from the site occurs through surface waters, groundwater and air. There apparently exists a great capacity for migration of wastes from the site. The potential for and actual migration must be better defined to establish the scope and affected area of pollutant contamination at the landfill.

Further, Hooker has alleged that certain areas adjacent to the site have been used as a municipal waste landfill. A geotechnical verification of this report is indicated.

a. Scope of Work

- 1) Hydrogeological assessment of the landfill site using combination of resistivity measurements, electromagnetic measurements, and ground penetrating radar.
- 2) Evaluation of subsurface materials disposed at the landfill using remote EM and radar measurements.

- 3) Technical consultation concerning methodologies employed, applications at the Hyde Park Landfill and results of the study.
- 4) Prepare affidavits and provide expert testimony as requested by Project Manager.
- 5) Prepare formal report of landfill evaluations, findings and conclusions.
- 6) Travel to and from Niagara County, N.Y. landfill site, Washington, D.C. and Buffalo, N.Y. as requested.

5. Schedule of Fees

To be negotiated by E & E, Inc.

6. Administrative Information

Name and address of consultant:

To be specified by E & E, Inc.

SUBCONTRACT JUSTIFICATION

Certain remote sensing techniques may be useful in determining the extent of subsurface soil and groundwater contamination at Hyde Park Landfill. Migration and plume of contamination may be defined more rapidly using these remote sensing techniques than by use of more conventional core and well drilling methods. A rapid definition of these site conditions is necessary because of ongoing negotiations and pendency of court hearings concerning Hooker Chemical Corp. enforcement actions.

In addition, Hooker has made allegations concerning the quantity and type of buried wastes on site which may be pertinent to the case. Remote sensing EM and radar techniques will be useful in defining and mapping the location and extent of contained and uncontained buried wastes.

Since FIT facilities are not equipped with remote sensing instrumentation, an appropriate consultant ~~should be retained through the FIT contract mechanism.~~ A credible, experienced consultant in geotechnical assessments ~~must be retained~~ who has appropriate field instrumentation capability and is prepared to provide consultation and court testimony for the Hazardous Waste Enforcement Task Force.

100

2.30p

2100 Bay Area Blvd.
Houston, Texas 77058
(713) 488-9240

ADMISSIONS
2100

July 13, 1981

Mr. Patrick M. Flanagan
Personnel Manager
JRB Associates Inc.
8400 Westpark Dr.
McLean, Virginia 22102

Dear Mr. Flanagan:

This is to certify that David Bruce Twedell received the degree of Bachelor of Arts with a concentration in Physical Sciences on May 12, 1979.

I regret that, I cannot accept your personal check nor your request for Mr. Twedell's transcript. The University does not accept personal checks from other than registered students and the University Administration precludes your latter request. I am sure Mr. Twedell will comply with your wishes to forward a transcript of his work at UH/CLC.

Should there be further questions please do not hesitate to contact me at (713) 488-9240.

Sincerely,



Harry L. Rhodeback
Associate Registrar

JLR:bl

OF: 11/10/81

FROM: Region NPMO AM

TO: NPMO

DATE: November 5, 81

SITE: Hooker Chemical and Plant

TDD No: HQ-8110-01

(1)

OBJECT/DESCRIPTION: Support team to provide expertise to investigation, litigation and negotiation.

ATTACHMENTS:

- ☒ 1. TDD
- ☐ 2. Bid Package, IFB ☐ , RFP ☐ , RFQ ☐
- ☐ 3. Prospective Bidders List
- ☐ 4. Bid Price Sheets and/or proposals
- ☐ 5. Sole Source Justification
- ☐ 6. RAM memo of negotiation/selection
- ☐ 7. OPT Form 50 (only if $\geq$ \$10K)
- ☒ 8. Copy of Proposed Contract or Letter of Intent

1. The attached request is from Region NPMO. TDD No. HQ-8110-01 has been submitted by ROGER GRAY and SCOTT FREDRICKS and has an E & E EPA estimated completion date of 31 December, 1981

Total estimated cost for this effort is \$ UTE 725,000. Recommended contractor (subcontractor) is Dr. Mason, Mr. Twadell, JBF Scientific

2. Your approval of this proposed contractual action may be indicated below.

Roger J. Gray
R. Gray, Program Manager

11/6/81
Date

approved ☒
disapproved ☐ Reason: _____

R. Frank
R. Frank, V.P. Finance

Date

approved ☐
disapproved ☐ Reason: _____

(if cost + > \$10K)
(if fixed price $\geq$ \$25K)

S.D.
EPA Project Officer
(if $\geq$ \$1K)

Nov. 6, 81
Date

approved ☒
disapproved ☐ Reason: _____

EPA Contracting Officer

Date

approved ☐
disapproved ☐ Reason: _____

(if cost + > \$10K)
(if fixed price $\geq$ \$25K)

ecology and environment, inc.

ROSSLYN CENTER, 1700 NORTH MOORE ST., ARLINGTON, VA. 22209, TEL. 703-522-5255

Interaction / Specialists in the Environmental Sciences

Date: November 5, 1981

To: Bill Topping, EPA

Via: Hal Snyder, EPA

From: Jack E. Wilson

NPMO Contracts Coordinator

Subject: TDD HQ-8110-01, Request for Consulting Services to Support Hooker Chemical and Plastics Corporation negotiations.

Attachments: 1) TDD HQ-8110-01, October 8, 1981
2) PO No. 1846, Dr. Sam Mason
3) PO No. 1847, Mr. Dave Twedell
4) PO No. 1843, JBF Scientific Corporation

Reference: EPA TIT Contract 68-01-6056

In Reply Refer To: TDD HQ-8110-01

The attached TDD requests E&E, Inc. to extend the subject consulting services from 1 October, 1981 through 31 December, 1981.

This TDD requires three subcontracts for consulting services which in two cases will exceed \$25,000, thus, your approval is required.

The individual consultants and their respective hourly rates remain the same as in the past three months (TDD-8010-38).

The attached table provides an overview of the current financial status for the subject consultant support. An amount of \$23,884.59 (say \$25,000) in addition to the available unspent carryover from previous Hooker related TDD's, is required to fully fund this subject TDD.

Your approval of the use of these consultants at an added estimated cost of \$25,000 over already authorized funding levels is requested. Please indicate your concurrence below and return a copy to me.

Sincerely,

Jack E. Wilson
Jack E. Wilson

NPMO Contracts Coordinator

Concur with above:

Comments:

Bill Topping, Contracting Officer

Date

Name	Funds Authorized - EPA			Status thru 9/30/81		Funds Available From Previous Periods	TDD HQ-8110-01 PO's
	HQ-8010-1 11/1/80-2/28/81	HQ-8010-2A 3/1/81-6/30/81	HQ-8010-3B 7/1/81-9/30/81	Authorized	Actually Spent		
B. Mason	27,000	10,000	27,000	64,000	55,869.84	-	27,000
D. Twadell	25,000	26,500	20,400	71,900	60,075.83	-	20,400
C. Fogel, et al.	43,200	46,000	25,500	114,700	85,638.92	-	25,500
Totals	95,200	82,500	50,000 ³	250,600	201,584.59	49,015.41	72,900 ⁴

- 1) Includes all procurements for B. Mason, both directly and billed thru Geomet,
- 2) Includes all procurements for D. Twadell, both directly and billed thru JRB,
- 3) EPA EDP HQ-8010-3B only authorized an additional \$50,000. Unexpended funds available from previous TDD's were used to fund the \$22,900 above the \$50,000 authorized by EPA.
- 4) \$22,904.59 additional funds in addition to available carryover are required to fully fund the three PO's being executed under TDD HQ-8110-01
 $(72,900 - 49,015.41 = 22,904.59)$

4172 II		UNCONTAMINATED HAZARDOUS WASTE THE PROJECT ecology and environment, inc.			10/1/81	
3. Priority:	4. Authorized Oversee	5. EPA Site Identification Number	6. Completion Date	7. 9. General Info:		
☒ High ☐ Medium ☐ Low	☐ Yes ☒ No		31DEC81	☐ Yes ☒ No ☐ AG 100 ☐ PR 100		
8. General Task Description: <i>Senior negotiating support team to provide technical expertise to the Hupker Chemical & Plastics Corp. investigation, litigation and negotiation.</i>						
9. Specific Elements: <i>See attached subcontract scope of work.</i>						
10. Location of Office						
CONTACT CHUCK MORGAN 382-3123						
11. Desired Report Form: Formal Report ☐ Letter Report ☐ Formal Briefing ☐ Other (Specify):						
12. COMMENTS: <i>This is a renewal of an existing subcontract currently in use for improvement investigation support.</i>						
13. Authorizing DPO: <i>Scott C. Anderson (Signature)</i>				14. Date: <i>Oct 6, 81</i>		
15. Received By: ☒ Accepted ☐ Accepted with exceptions ☐ Rejected <i>Roger J. Day (FTEL Signature)</i>				16. Date: <i>10/8/81</i>		

Exceptions Comments From (15)

Sheet 1 White - FTEL Copy
 Sheet 2 Green - DPO Copy
 Sheet 3 Pink - Contracting Officer's Copy (Washington, D. C.)
 Sheet 4 Goldrod - Project Officer's Copy (Washington, D. C.)
☐ Photocopy to E & E NPIA (Washington, D. C.)

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RENEWAL OF SUBCONTRACT SCOPE OF WORK

1. Contract Title

Senior negotiation support team for technical support in Hooker Chemicals and Plastics Corp. negotiations on the S-Area and 102nd Street Landfills.

2. Period of Performance

Effective ASAP and lasting thru approximately December 31, 1981.

3. Project Manager

Chuck Morgan (WH-527M)
U.S. Environmental Protection Agency
Office of Hazardous Waste Enforcement
401 M St., S.W.
Washington, D.C. 20460

4. Statement of Work

A. Background

The Hooker Chemicals and Plastics Corp. disposed of chemical wastes from their chemical manufacturing processed at their Niagara Falls plant at the S-Area and 102nd Street Landfills. Chemicals from the waste disposed of at these landfills have been identified as migrating from the sites.

The migrating chemicals are present in sufficient quantities to pose an endangerment to human health. Water entering the sites has mixed with Hooker's wastes and leached through the soil and into the bedrock. At the S-Area the wastes have migrated through the overburden and bedrock into the water treatment plant for the City of Niagara Falls which is adjacent to this site. The wastes which have penetrated the bedrock have migrated beneath the Niagara River. At the 102nd Street, the wastes have migrated through the overburden into the Niagara River, an international boundary of the United States.

B. Scope of Work

1) Advise and consult with the Project Manager on matters concerning migration of pollutants in soil, geohydrology, and chemistry.

2) Participate in negotiating sessions when necessary as determined by Project Manager to determine appropriate remedial actions to clean up the sites and eliminate chemical migration.

3) Perform as witnesses in fields of specialization in the event negotiations are not successful.

4) Prepare reports and affidavits (if necessary) to document data reviews for use in negotiations and/or litigation.

5) Travel to New York City, Albany, New York, Buffalo/Niagara Falls, New York and Washington, D.C., as appropriate for working sessions, negotiations, and litigation.

C. Schedule of Fees

Services are to be billed by the hour. Overtime work is anticipated. The services should include travel expenses, junior/middle level scientific assistance, graphics support, cost estimation support, and clerical/secretarial support.

The total number of consulting service hours estimated for each senior level scientist is estimated at 500 hours for the period June 1, 1981 to September 30, 1981.

5) Administrative Information

Specializations needed for team:

A. Soil Scientist;

B. Geohydrologist; and,

C. Chemist with analytical chemistry knowledge

International Specialists in the Environmental Sciences

71

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TERMS:

DELIVERY REQUIRED:

[illegible]

International Specialists in the Environmental Sciences

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TO

1700 N. Moore St.
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BILLING ADDRESS Same As "Ship To"

ATTENTION:

Dr. Ben J. Mason
7601 Long Pine Dr.
Springfield, Va. 22151

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