

April 5, 2004 (3:36PM)

**UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION****OFFICE OF SECRETARY
RULEMAKINGS AND
ADJUDICATIONS STAFF****ATOMIC SAFETY AND LICENSING BOARD PANEL**

Before Administrative Judges:
Michael C. Farrar, Presiding Officer
Charles N. Kelber, Special Assistant

In the Matter of)	Docket No. 03036239
CFC Logistics, Inc.)	ASLBP No. 03-814-01-ML
)	
Materials License)	Date: April 2, 2004
)	

**INTERVENORS' REPLY TO SUPPLEMENTAL BRIEFS OF
NRC STAFF AND CFC LOGISTICS ON AREA OF CONCERN
REGARDING DECOMMISSIONING FINANCIAL ASSURANCE**

Intervenors expand herein upon their Specification of Areas of Concern dated August 14, 2003 (ML032460725) regarding financial assurance certification and future decommissioning and decontamination (D&D) of a cobalt-60 irradiator operated by CFC Logistics, Inc. ("CFC") in Milford Township, Pennsylvania. Because of the unique, prototypical design of the GENESIS I Category III irradiator ("irradiator") installed at CFC's facility, as well as security risk factors previously specified, Intervenors herewith assert that CFC's current and future required financial assurance certification amounts -- \$75,000 and \$113,000, respectively -- are insufficient. The Commission's updated final rule on "Financial Assurance for Materials Licensees," 68 Fed. Reg. 57327, dated October 3, 2003 requires an increase in CFC's present bond amount by June 2, 2005 because of the Company's authorized possession limit of 1,000,000 curies of cobalt-60.

The experimental characteristics and unusual risks presented by CFC's irradiator are discussed in detail within the Renewed Motion for Stay dated November 10, 2003 and Intervenor's Reply To Responses of NRC Staff and CFC Logistics Regarding Staff Questions and Pending Motions dated April 2, 2004. The irradiator poses a serious threat of accident and therefore great potential for excessive cleanup costs associated with any emergency removal action. Intervenor's contend that CFC should therefore be required to submit a site-specific decommissioning plan under 10 C.F.R. § 30.35 (e) and that special circumstances exist to warrant reference to the Commission as permitted under 10 C.F.R. §§ 2.1209(d), 2.1239(b), 2.1251(d). This filing is supported by the 3rd Declaration of Dr. Marvin Resnikoff, Ph.D. in Support of Petitioners' Motion for a Stay ("3rd Declaration") dated March 17, 2004. It is attached hereto as Exhibit A.

Intervenor's hereby reply to briefs filed by NRC Staff on March 5, 2004 ("Staff Brief") and CFC Logistics on March 12, 2004 ("CFC Brief"). The Staff and CFC Briefs contain responses to a Prehearing Order (Regarding NRC Staff Participation and Other Matters) issued by the Presiding Officer on February 17, 2004. The Presiding Officer directed the NRC Staff (Staff) to furnish its views on the decommissioning bond "area of concern" raised by Intervenor's in the context of recent high-cost D&D activities at the bankrupt PermaGrain Products wood flooring irradiation facility. The PermaGrain plant, also in Pennsylvania, was located in the Quehanna Wild Area of Clearfield County. The Presiding Officer further directed the Staff to address whether an exception is warranted from the Commission's regulations regarding generic decommissioning bond amounts.

The Staff and CFC continue to oppose Intervenors' request for a referral to the Commission regarding the inadequacy of required financial assurance bond amounts for the Milford Township irradiator. However, their position is without merit, for the reasons discussed below.

I. ARGUMENT

The decommissioning and decontamination bond offered by the Licensee, whether \$75,000 or \$113,000, is completely inadequate to cover the cleanup of any accident at the CFC Logistics irradiation facility. As stated in Petitioners' Motion for Stay of Issuance of License dated September 4, 2003, the NRC estimated that cleanup costs would be approximately \$128,000 for an irradiator that does not have contamination problems. (See Proposed Rule, Financial Assurance Amendments for Materials Licensees, 67 Fed. Reg. 62,403 dated October 7, 2002.) According to Dr. Marvin Resnikoff in his 3rd Declaration, should CFC Logistics go bankrupt or have an accident involving on- or off-site contamination, "the company has not posted sufficient funds to decommission the facility." The potential harm caused by an intentional or accidental radiological release from the CFC Logistics plant would be irreparable and significant.

The Staff Brief describes the differences in the two facilities under comparison, noting the legacy characteristics of the PermaGrain plant. It states that the sealed sources used at PermaGrain were nonstandardized and preceded the registration requirement. This is in contrast to those supplied to modern irradiators that are now registered pursuant

to 10 C.F.R. § 32.210. Consequently, the PermaGrain pencils had to be transported to a low-level radioactive waste disposal site in Barnwell, South Carolina. By contrast, the Staff observes that CFC may arrange for a return of its sealed sources to the supplier or transfer them to another facility so they are “not likely to become a liability.” (*Id.*)

Intervenors submit that there is no validity to the Staff’s statement that “no analogy can be reasonably drawn between the conditions that PermaGrain and the governmental agencies faced at the time of its forced decommissioning, and the conditions that CFC-L is anticipated to face at the time of the decommissioning of its facility and site.” Contrary to the Staff’s contention, there *is* a strong correlation between CFC’s facility and the expensive and dangerous scenario that evolved at the PermaGrain site. The linkage is that the PermaGrain debacle clearly demonstrates that only minor lapses in administrative control are required for a complicated, chaotic, and expensive cleanup scenario to ensue, even one that does not involve on- or off-site radiological contamination. The Staff Brief avoids a detailed discussion of the history of PermaGrain. In so doing, they would expose their own lapses in scrutiny of the operation of that facility.

PermaGrain demonstrates the failure of NRC Staff to ensure that all licensees maintain adequate records regarding the strength, condition, and origin of radioactive sources, and that they have been used and maintained consistent with NRC regulations and guidelines. At PermaGrain, older, unregistered cobalt-60 pencils were used alongside of newer, registered sources. Organizational disarray at the facility led to a situation in which *all* sources must be removed to Barnwell, regardless of registration

status, thereby escalating costs to the exorbitant levels described in the Staff and CFC Briefs.

The lesson of PermaGrain further demonstrates that, in a period of months, promises and agreements may simply vanish into thin air, leaving U.S. and Commonwealth taxpayers to secure and decontaminate orphaned radioactive sources and sites. This factor is especially significant in light of the slipshod documentation, lax investigation procedures, and erratic site management already demonstrated by CFC Logistics, its contractors, and the NRC Region I Office. The brief but already troubled history of the Milford Township irradiation facility is documented in Intervenor's reply brief regarding staff questions and pending motions dated April 2, 2004.

In his Declaration, Dr. Resnikoff states that Region I, and specifically Branch Chief John Kinneman, "have been notably lax in requiring licensees to accurately estimate decommissioning costs and to provide the necessary financial assurance. Without the ready availability of cash, companies cannot easily recover in case of an accident and the community is at peril." Market and other exigencies may conspire to convert "diligent" plant owners and operators into bankrupt, runaway Licensees.

Intervenor's have examined a document prepared by the Region III Office of the United States Environmental Protection Agency dated April 28, 2003 (attached hereto as Exhibit B). The subject is a "Request for Funds and Exemption from Statutory Limits for a Removal Action at the PermaGrain Products, Inc. Site, Moshannon State Forest, Quehanna Wild Area, Clearfield County, Pennsylvania." The author is Vincent E. Zenone, the On-Scene Coordinator ("OSC") of the removal action undertaken during

2003 at the PermaGrain facility. That action was deemed necessary under the Comprehensive Environmental Response, Compensation and Liability Act (“CERCLA”) and includes a federal funding request of \$3,000,400 to pay removal contractors.

In the wake of PermaGrain’s Chapter 7 bankruptcy filing, the OSC identified threats posed by the abandoned licensed byproduct material and prepared an Action Memorandum to request adequate funds to mitigate risks. The OSC described the insufficient funding circumstances experienced by the Commonwealth of Pennsylvania that restricted the state’s ability to afford the costly security and maintenance of the radioactive sources beyond a period of approximately four months.

In his report, the OSC states that “the very significant threat of release of a hazardous substance at this Site presents an imminent and substantial endangerment to public health, welfare or the environment.” Consultation with the EPA’s Regional Radiological Response Coordinator identified the following conditions that could result in a radiological cobalt-60 release from the PermaGrain facility:

- (1) loss of irradiator pool water,
- (2) degradation of pool water quality, or
- (3) absence of security.

Note that briefs filed by Intervenors in the CFC Logistics matter contend that these same serious conditions are at risk of occurring at the Milford Township irradiation facility if corrective action is not taken immediately.

The OSC specified the proposed actions necessary to complete a federal removal response action at the PermaGrain facility. The EPA’s requirements to restrict access to

the site and remove, package, transport, and dispose of the cobalt-60 sources are described as follows:

- Field support facilities (command post) to provide on-site communications, administrative support, supervision and management of cleanup personnel (e.g. trailer, phones, electrical services, etc.) as needed to facilitate day-to-day operations.
- Security and maintenance of the sealed Cobalt-60 Sources, in a manner which replaces, supplements or compliments such activities currently implemented on-site by PADEP's contractor (Scientech).
- Arrange for possession of the Cobalt-60 sources by an NRC licensee during removal, packaging, transportation and disposal operations.
- Preparation of all plans and procedures required to perform the Removal Action including but not necessarily limited to, a project Work Instruction for Source Handling Activities, a Radiation Protection Plan (Health & Safety Plan), a Quality Assurance Plan, and a Transport and Disposal Plan.
- Appropriate packaging and highway conveyance for transport of the Cobalt-60 sources including all equipment and materials required for package handling and for the compliant packaging of the sources in the provided container/packaging.
- Provide radiological oversight for the removal of the Cobalt-60 sources from the source holders in the existing irradiator pool, packaging the sources into appropriate shipping containers, as required by US Department of Transportation (USDOT) Hazardous Materials regulations, and the subsequent transportation to the disposal facility.
- Prepare required USDOT Hazardous Materials shipping papers, and required NRC packaging documentation, as appropriate, for the transport of the completed radioactive materials package to the disposal facility.
- Arrange for disposal of the radioactive materials package.
- Arrange for transport of the radioactive materials packages to the disposal facility.
- Perform all activities required to terminate use of the NRC license upon completion of disposal activities.
- Restoration of the site.
- Coordinate the transition of the site control (Post-Removal Site Control), from EPA to the Commonwealth of Pennsylvania (PADCNR).

Intervenors contend that, in the event of an accident at CFC's irradiator leading to dispersion of radioactive cobalt-60 particles, the \$3,000,400 initially requested to pay commercial contractors to decommission the PermaGrain site will become merely a


“drop in the bucket.” Moreover, the current climate of deregulation has resulted in a reduction in funding levels for the EPA’s Superfund program. Intervenor herewith submit that a facility cleanup could *not* be accomplished when the potentially responsible parties are not financially able to complete the removal activities. Further, the risks of delayed action when no off-site contamination is even present are so severe as to cause even greater alarm. They were characterized as follows by the OSC at PermaGrain:

“If action is delayed or not taken, the removal of one or more of the sealed sources without detection might provide highly radioactive material for surreptitious exposure of members of the public or for a radiological dispersal device (RDD). Unless the Removal Action is completed, the imminent and substantial endangerment posed by the Site will remain unabated....”

II. CONCLUSION

For the foregoing reasons, the Atomic Safety and Licensing Board should grant a waiver regarding decommissioning and decontamination bond amounts and refer to the Commission the Intervenor’s request for an exception from the regulations to require a site-specific D&D plan. Funding within this plan should anticipate “worst-case scenarios” rather than cast a blind eye upon them.

Respectfully submitted,



Robert J. Sugarman, Esq.
Sugarman & Associates
100 North 17th Street – 11th floor
Philadelphia, PA 19103
Telephone: (215) 864-2500
Fax: (215) 864-2501
E-mail: rjsugarman@aol.com

SUGARMAN & ASSOCIATES, PC

ATTORNEYS AT LAW
ROBERT MORRIS BUILDING - 11TH FLOOR
100 NORTH 17TH STREET
PHILADELPHIA, PENNSYLVANIA 19103

ROBERT J. SUGARMAN *
DEBBIE L. GOLDBERG
HEATHER R. BRINTON
JENNIFER A. MURPHY**

215-864-2500 • FAX: 215-864-2501
EMAIL: RJSUGARMAN@AOL.COM

BUCKS COUNTY OFFICE
122 NORTH MAIN STREET
DOYLESTOWN, PA 18901

215-348-8786 • FAX: 215-230-1922

*Also admitted in NY, DC
**Also admitted in NJ

April 2, 2004

Honorable Robert A. Freedberg
Court of Common Pleas
Northampton County Government Center
669 Washington Street
Easton, PA 18042-7498

RE: Wind Gap Borough v. Wind Gap Municipal Authority
No. C0048-CV-2003005928


Dear Judge Freedberg:

I represent the defendant in the above matter, which has been settled as per the enclosed Settlement Agreement. The matter is listed for argument on preliminary objections for Tuesday, April 6.

Steven Goudsouzian, my counterpart representing the plaintiff, has informed me that he will appear on Tuesday, if the Order to Settle has not been filed, to inform the Court that this case is settled.

To avoid any appearance of disrespect to the Court, however, I am writing to confirm the above.

Respectfully,


Robert J. Sugarman
Counsel for Defendant

RJS:saj
Enclosure
cc: Steven Goudsouzian, Esquire

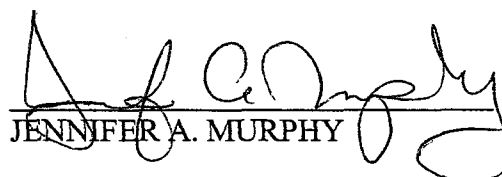
COUNSEL FOR INTERVENORS

CERTIFICATE OF SERVICE

I, Jennifer A. Murphy, hereby certify that I have served a copy of the Intervenor's Reply to Supplemental Briefs Regarding Decommissioning Financial Assurance by first-class mail, email, and facsimile on the following persons on this date:

Anthony J. Thompson, Esquire
Law Offices of Anthony J. Thompson, PC
1225 19th Street, NW Suite 200
Washington, DC 20036
FAX 202-496-0783

Stephen H. Lewis, Esquire
Office of General Counsel
Mail Stop O - 15 D21
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001
FAX 301-415-3725


JENNIFER A. MURPHY

DATED: April 2, 2004

EXHIBIT A

4682611

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

APR 28 2003

SUBJECT: Request for Funds and Exemption from Statutory Limits for a Removal Action at the PermaGrain Products, Inc. Site, Moshannon State Forest, Quehanna Wild Area, Clearfield County, Pennsylvania

FROM: Vincent E. Zenone, OSC
Removal Response Section (3HS31)

TO: Abraham Ferdas, Director
Hazardous Site Cleanup Division (3HS00)

I. PURPOSE

A Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA") Removal Action is necessary at the PermaGrain Products Inc. Site ("the Site") located at 115 Reactor Road in the Moshannon State Forest, Quehanna Wild Area, Clearfield County, Pennsylvania. The On-Scene Coordinator ("OSC") has identified the threats posed by the conditions at the Site. The purpose of this Action Memorandum is to request funds and an exemption from the statutory limits to conduct the Removal Action described herein to mitigate the threat posed by hazardous substances, pollutants or contaminants at the Site. The contaminant of concern at the Site is radioactive Cobalt-60 which is a listed hazardous substance in accordance with Title 40, Code of Federal Regulations, Section 302.4 ("40 § CFR 302.4").

II. SITE CONDITIONS

A. Site Description

The Site is located within a building at 115 Reactor Road, in a remote area of the Moshannon State Forest, Quehanna Wild Area, Clearfield County, Pennsylvania. The Quehanna Wild Area of the Moshannon State Forest is an area of rugged terrain in the Allegheny Plateaus, with steep valley walls commonly having topographic relief in the 500-foot range. The Reactor Road facility was built on the east flank of southwest trending Meeker Run ravine, which is a small tributary of the southeast flowing Mosquito Creek. Mosquito Creek enters the West Branch of the Susquehanna River at Karthaus, Pennsylvania, approximately 10 miles to the southeast of the facility. This area is heavily used for recreation year round. There are many camps and permanent residences along the stream less than 5 miles south of the Site. The land and the facility, owned by the Commonwealth of Pennsylvania Department of Conservation and Natural Resources ("PADCNR"), is where PermaGrain Products, Inc. operated a wood flooring production facility utilizing radioactive Cobalt-60. The Cobalt-60 sources are located in a reactor pool, in a Nuclear Materials & Equipment Corporation ("NUMEC") irradiator and in a transfer cask within the building. In another portion of the building, a contractor hired by the Commonwealth of Pennsylvania Department of Environmental Protection ("PADEP") is cleaning up

Strontium-90 ("Legacy Contamination") from previous site tenants. The Legacy Contamination is not included as part of the federal fund-lead removal action.

B. Site Background

In 1955, fifty thousand (50,000) acres of State forest land was sold to Curtiss Wright Corporation which developed nuclear jet engines and conducted research in nucleonics, metallurgy, electronics, chemicals and plastics. A small research reactor (pool type) was used on-site until the early 1960s when Curtiss Wright Corporation ceased its activities, removed all the reactor fuel from the site and donated the facility to the Pennsylvania State University. The facilities were used by Pennsylvania State University, NUMEC and Martin-Marietta Corporation. During that time, the hot cells and other systems became contaminated with Strontium-90 (referred to in this document as the Legacy Contamination) and the reactor pool was converted to use as an underwater irradiator using Cobalt-60.

In 1966, the land was returned to the Commonwealth of Pennsylvania ("the Commonwealth") and is now managed by PADCNR.

In 1967, ARCO Chemical Company ("ARCO") purchased the right to use the irradiator to produce a plastic impregnated wood flooring product.

In 1977, employees purchased the operation from ARCO, formed PermaGrain Products, Inc., and continued the production of the plastic impregnated wood flooring product.

Since 1978, PermaGrain Products, Inc. ("PermaGrain") has been a tenant of the Commonwealth at the Commonwealth-owned facility located in the remote area of the Moshannon State Forest, Quehanna Wild Area, Clearfield County, Pennsylvania. Within the building located at 115 Reactor Road, PermaGrain operated a wood flooring production facility utilizing radioactive Cobalt-60 (Co-60) to bond acrylic to wood.

Since July 1998, in another portion of the facility, a contractor hired by PADEP is cleaning up the Legacy Contamination from previous site tenants.

In September 1998, a radiation (Strontium-90) release occurred inside the Reactor Road facility during the Legacy Contamination cleanup efforts. Subsequently, in 1999, PADEP determined that PermaGrain must be relocated to a new facility so that the Legacy Contamination cleanup could be completed. PADEP believed that the United States Department of Energy's predecessor, the Atomic Energy Commission, through its contractor, Martin-Marietta, was responsible for the contamination at the Reactor Road facility, and attempted to seek compensation for the relocation from the federal government.

By the summer of 2002, PADEP's efforts to recover costs from the federal government and fund the costs of relocating PermaGrain Products, Inc. to a new facility reached an impasse.

On November 11, 2002, PermaGrain Products, Inc. ceased operations, but continued maintenance and security of the Cobalt-60 sources.

On November 12, 2002, the Nuclear Regulatory Commission ("NRC") was informed by PermaGrain that bankruptcy was imminent and, that subsequent to bankruptcy, maintenance and security of the Cobalt-60 sources would no longer be conducted.

On December 9, 2002, the NRC informed EPA's Regional Radiological Response Coordinator of the pending bankruptcy and abandonment of the Cobalt-60 sources and requested EPA assistance as may be applicable to evaluate the potential threats for consideration of federal removal response activities under CERCLA.

On December 10, 2002, the OSC participated in a conference call with EPA Regional Management, EPA's Regional Radiological Response Coordinator, PADEP, PADCNR and the NRC to plan for immediate Site security and long-term cleanup measures which may be necessary should PermaGrain declare bankruptcy and abandon the Cobalt-60 sources. The NRC indicated it could issue an order to PermaGrain to continue security and maintenance, but doubted compliance, especially after bankruptcy is declared. PADEP indicated it would provide the immediate short-term security needs at the Site should PermaGrain declare bankruptcy and abandon the Cobalt-60 source. PADEP also requested EPA to consider federal removal response action for long-term cleanup as may be necessary. EPA agreed to perform a removal evaluation to determine if conditions on-site met the criteria initiating a removal action pursuant to the National Oil and Hazardous Substances Pollution Contingency Plan ("NCP"), found at 40 CFR § 300.415. The OSC made plans to commence an on-site removal evaluation on December 18, 2002, in coordination with, and accompanied by, the Regional Radiological Response Coordinator, officials from PADEP, PADCNR and the NRC, and representatives from PermaGrain.

On December 12, 2002, the OSC participated in a conference call with EPA Regional Management, EPA's Regional Radiological Response Coordinator, PADEP, PADCNR and the NRC to continue to plan for immediate Site security and long-term cleanup measures which may be necessary should PermaGrain declare bankruptcy and abandon the Cobalt-60 sources. The NRC indicated it would issue an order to PermaGrain to continue security and maintenance, but doubted compliance, especially after bankruptcy is declared. PADEP reiterated its commitment to assume incident command and provide the immediate short-term security needs at the Site should PermaGrain declare bankruptcy and abandon the Cobalt-60 source, in anticipation of EPA's consideration of a federal removal response action for long-term cleanup. EPA reiterated its intent to commence an on-site removal evaluation to determine if conditions on-site met the criteria initiating a removal action pursuant to the NCP on December 18, 2002.

On December 17, 2002, PermaGrain filed a petition for Chapter 7 bankruptcy.

On December 18, 2002, the OSC initiated an on-site removal evaluation. Radiation levels did not exceed normal background, even in the irradiator pool storage room, and therefore, the OSC determined that there had not been a release of hazardous substances from the PermaGrain facility at that

time. The OSC also determined that the hazardous substances at the PermaGrain facility did not pose an imminent and substantial threat of release at that time due to the appropriate actions (to ensure security, monitoring and maintenance of the Cobalt-60 sources) by the NRC, PADEP and PADCNR. Cobalt-60 is listed as a hazardous substance in 40 CFR Part 302, Table 302.4 "CERCLA Hazardous Substances and their Reportable Quantities".

Although the OSC determined that there had not been a release from the PermaGrain facility, the OSC sought clarification regarding the term "release" in regards to the Cobalt-60 sources and consulted with the Regional Radiological Response Coordinator who indicated that a release from the PermaGrain Products, Inc. facility would be equivalent to an exposed Cobalt-60 source and that human exposure to such a release could be lethal. The Regional Radiological Response Coordinator described the following conditions which could result in a release from the facility:

- (1) loss of irradiator pool water,
- (2) degradation of pool water quality, or
- (3) absence of security.

The OSC informed PADEP and PADCNR, that due to the Commonwealth's ownership of the land and the facilities, and perhaps through the Commonwealth's contractual (landlord-tenant) relationship with PermaGrain, that the Commonwealth would also be considered a Potentially Responsible Party ("PRP") and subject to EPA removal response activities, including applicable enforcement actions, should conditions on-site change and a release occur or should the threat of release become imminent.

On December 18, 2002, PADEP arranged for monitoring, maintenance and security of the Cobalt-60 sources, through the contractor (Scientech, Inc.) that is currently under contract with the Commonwealth for the remediation of the Legacy Contamination from previous site tenants in another portion of the Reactor Road facility. PADEP indicated its intent to maintain site security indefinitely while the bankruptcy is resolved.

On January 21, 2002, in response to the Commonwealth's PRP status, PADEP respectfully requested EPA no longer participate in future meetings or conference calls concerning PermaGrain and the Cobalt-60 sources. PADEP indicated that it would, in conjunction with PADCNR, continue to work with the NRC, and the PermaGrain Trustee, et al, to resolve the Cobalt-60 source(s) removal.

By late early February, however, the Commonwealth began to indicate that it might not be able to continue to fund the significant security and maintenance costs associated with the Cobalt-60 sources.

On February 14, 2003, the Commonwealth (PADEP and PADCNR) formally informed EPA that, due to financial constraints, it would not be able to continue to provide security, maintenance and essential services of the Cobalt-60 sources beyond April 30, 2003. PADEP and PADCNR, therefore, urged the NRC to immediately designate the Cobalt-60 sources as abandoned licensed byproduct material and requested EPA to effect an immediate emergency removal. The NRC also expressed its

concerns that, should the Commonwealth of Pennsylvania no longer maintain essential site security and maintenance, the Cobalt-60 would be abandoned and unsecured, and thus pose an imminent and substantial threat of release to the environment and a potential hazard to the common defense and security. The NRC, therefore, also requested EPA to effect emergency removal actions to promptly remove, prepare for shipment and dispose of the Cobalt-60.

Upon further consultation with officials from EPA's Hazardous Sites Cleanup Division, Regional Management, the Regional Radiological Response Coordinator, the Commonwealth of Pennsylvania (PADEP and PADCNR), and the Nuclear Regulatory Commission (NRC), the OSC determined that the Site met the NCP criteria, found at 40 CFR § 300.415, for initiating a Removal Action as a result of the pending change in Site conditions and homeland security concerns related to the numerous high-activity Cobalt-60 sources, and therefore, an emergency removal response action pursuant to Section 104 of CERCLA, as amended, 42 U.S.C. § 9604, would commence as soon as possible, but no later than immediately upon the absence of maintenance and security of the Cobalt-60 sources.

The purpose of this action memorandum is to request sufficient funding to remove, package, transport and dispose of the Cobalt-60 sources off-site to eliminate the threats posed to public health. Pursuant to Delegation of Authority 14-2, the OSC will obligate CERCLA funding in the amount of \$3,000,400 to initiate an emergency Removal Action to secure the Site and properly address the threats posed by the Cobalt-60 present at the Site. The Legacy Contamination, being addressed by the Commonwealth, is not included as part of the federal fund-lead removal action.

C. Quantities and Types of Substances Present

The Cobalt-60 sources are located in a reactor pool ("pool irradiator"), in a NUMEC irradiator, and in a transfer cask on-site.

The pool irradiator is a water-filled pool, wherein the Cobalt-60 sources are located at a depth of approximately 25 feet. The pool irradiator is located in a high-bay area of the irradiator facility with head clearance of approximately 30 feet. The sources to be removed, packaged, transported and disposed consist of special form $^{60}_{27}\text{Co}$ rods approximately ½ inch in diameter by 37 inches long. Although a number of sources consist of two 18 inch rods or three 12 inch rods sleeved together to form one longer rod, it is not considered feasible to remove the 18 inch rods or 12 inch rods from their sleeves. Individual rods range in age from over 30 years to less than 5 years and vary in activity from less than 50 curies (Ci) to 1,500 Ci. Approximately 450 individual rods installed in 12 source holders on three source racks are to be removed, packaged, transported and disposed off-site.

The NUMEC irradiator, located near the pool irradiator, contains approximately thirty 12 inch source rods, with an activity less than 100 Ci, which are also to be removed, packaged, transported and disposed off-site.

The PermaGrain transfer cask contains a bent source (one 37 inch bent rod, approximately 200

Ci) which is also to be removed, packaged, transported and disposed off-site.

D. National Priorities List

The Site is not on the National Priorities List (NPL). The OSC has provided information to the assigned Site Assessment Managers and EPA managers for evaluation for listing the Site on the NPL. The proposed removal action is not expected to be inconsistent with or hinder any potential future remedial actions at the site. The OSC will inform the EPA Region III Site Assessment Section of actions at the Site and make data available as requested.

E. State and Local Authorities

The OSC has coordinated with both Commonwealth of Pennsylvania (PADEP and PADCNR) and Clearfield County officials regarding the actions anticipated at the Site. The Commonwealth of Pennsylvania has stated that it does not have the funding to take the actions which the OSC proposes, citing other priorities for their available funding and is therefore unable to address this site at the present time.

III. THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT

Section 300.415 of the NCP lists the factors to be considered in determining the appropriateness of a Removal Action. Paragraphs (b)(2)(i), (iii), (vii), and (viii) of Section 300.415 directly apply as follows to the conditions as they exist at the Site.

300.415 (b)(2)(i) Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants

No actual exposure to Cobalt-60 has been documented by the OSC at this Site. However, should the Cobalt-60 sources be abandoned, the potential for human exposure increases with absence of maintenance and security. Although, as stated in the background section, the Site is remotely located, it lies within the Quehanna Wild Area of the Moshannon State Forest, a popular hunting, fishing and recreational area. The area is heavily used for recreation year round. There are many camps and permanent residences along Mosquito Creek less than 5 miles south of the Reactor Road facility. If the Site were abandoned, the following represent potential releases or threats to public health and safety and the environment that could occur:

Deterioration in the quality of the water might result in deterioration of the containment of the sources resulting in the spread of radioactive contamination making parts of the building uninhabitable and threatening local groundwater. Considering the age of the sources and the pool, the probability of release increases with time.

If the facility were to be abandoned and without maintenance, the water level would reduce over time due to evaporation and/or leakage. This would result in release of radiation from the

exposed Cobalt-60 sources, increased radiation levels in the area around the Site and would eventually make it extremely hazardous to enter the building.

Uncontrolled access to the facility might allow an individual to receive a significant (possibly lethal) exposure to radiation.

300.415 (b)(2)(iii) Hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers, that may pose a threat of release

No actual release of Cobalt-60 has been documented by the OSC at this Site. However, should the Cobalt-60 sources be abandoned, the potential threat of release from the bulk storage containers on-site increases with absence of maintenance and security. Although, as stated in the background section, the Site is remotely located, it lies within the Quehanna Wild Area of the Moshannon State Forest, a popular hunting, fishing and recreational area. The area is heavily used for recreation year round. There are many camps and permanent residences along Mosquito Creek less than 5 miles south of the Reactor Road facility. The Cobalt-60 sources are located in three bulk storage containers on-site, which are further described as a pool irradiator, a NUMEC irradiator, and a PermaGrain transfer cask. If the Site were abandoned, the following represent potential releases from the bulk storage containers and describes the threats to public health and safety and the environment that could occur:

If the bulk storage containers (pool irradiator and NUMEC irradiator) were to be abandoned and without maintenance, the water level would reduce over time due to evaporation and/or leakage. This would result in release of radiation from the exposed Cobalt-60 sources, increased radiation levels in the area around the Site and would eventually make it extremely hazardous to enter the building.

If the bulk storage container (PermaGrain transfer cask) were to be abandoned, and in the absence of security, it could be removed from the Site and transported to a location where the bent Cobalt-60 source rod could be used to expose members of the public to radiation.

Uncontrolled access to the facility might allow an individual to receive a significant (possibly lethal) exposure to radiation.

300.415 (b)(2)(vii) The availability of other appropriate Federal or State response mechanisms to respond to the release

The Commonwealth of Pennsylvania (PADCNR and PADEP), while supporting the actions of EPA, have stated that they do not have the resources to continue maintenance and security after April 30, 2003, nor fund the removal, packaging, transport and disposal of the Cobalt-60 sources from the Site.

300.415 (b)(2)(viii) Other situations or factors that may pose threats to public health or welfare of the United States or the environment

Removal of one or more of the sealed sources without detection might provide highly radioactive material for surreptitious exposure of members of the public or for a radiological dispersal device (RDD).

IV. ENDANGERMENT DETERMINATION

The OSC has determined, based on information gathered from the removal site evaluation, that the very significant threat of release of a hazardous substance at this Site presents an imminent and substantial endangerment to public health, welfare or the environment.

V. EXEMPTION FROM STATUTORY LIMITS

Due to the unique nature of the threats posed by the hazardous (radioactive Cobalt-60) substances present at this Site, a \$2 million exemption is required to fully fund and implement the proposed actions for the removal, packaging, transport and disposal of the Cobalt-60 sources from the Site.

1. Immediate Risk to Public Health or Welfare or the Environment.

The amount of radiation on the Site poses an immediate risk to the public who may work or live in close proximity. Cobalt-60 emits gamma radiation. Gamma radiation is wave-like and can penetrate skin or other such barriers. If the Site were to be abandoned and without maintenance, the water level in the irradiator pool would reduce over time due to evaporation and/or leakage. This would result in release of radiation from the exposed Cobalt-60 sources, increase radiation levels in the area around the Site and would eventually make it extremely hazardous to enter the building in which the Cobalt-60 sources are located. If the Site were to be abandoned and without security, uncontrolled access to the building in which the Cobalt-60 sources are located might allow an individual to receive a significant, possibly lethal, exposure to radiation. The Commonwealth has stated it can not fund security and maintenance of the Cobalt-60 sources beyond April 30, 2003. Therefore, a \$2 million exemption is required to fund the removal action to address the immediate risk to public health or welfare or the environment.

2. Continued Response Actions are Immediately Required to Prevent, Limit or Mitigate an Emergency

Full implementation of the OSC's removal plan of action is required to prevent the potential threats to public health, or welfare, or the environment from becoming a reality. The dose rate from the Cobalt-60 sources in the bulk storage containers within the facility is high, possibly lethal to humans, and therefore, the potential for human exposure must be eliminated. Should an unforeseen event occur which disrupts the integrity of the facility or the bulk storage containers, the release of radiation from the Site could be widespread. The NRC and the Commonwealth have also expressed concerns that the removal of one or more of the sealed sources could provide highly radioactive material for surreptitious exposure of members of the public or for a radiological dispersal device (RDD). Due to the complex

and unique requirements for the security, maintenance, handling, transport and disposal of the Cobalt-60 source, such activities must be coordinated as a continuous response action. Therefore, a \$2 million exemption is required to fully fund a continuous response action required to immediately prevent, limit or mitigate an emergency.

3. Assistance Will Not Otherwise be Provided on a Timely Basis

The Commonwealth of Pennsylvania, although a PRP, has stated that it does not have the funding to take the actions which the OSC proposes, citing other priorities for their available funding, and is therefore unable to address this Site on a timely basis. PermaGrain Products, Inc., another PRP, is in Chapter 7 bankruptcy and funds which may become available to EPA through the liquidation of assets do not appear sufficient to conduct the removal action and will not be realized in time to implement the removal action in a timely manner. Although information concerning the Site has been provided to the Regional Site Assessment Section, the OSC does not believe the remedial evaluation mechanism for listing the Site on the NPL can be completed in a timely enough manner to prevent, limit or mitigate the emergency. The proposed removal action is not expected to be inconsistent with or hinder any potential future remedial actions at the Site. There are no other federal, State or local agencies capable of conducting the removal response action on a timely basis. Therefore, a \$2 million exemption is required to fund the removal action to address the immediate risk to public health or welfare or the environment on a timely basis.

VI. PROPOSED ACTIONS AND ESTIMATED COSTS

The OSC has determined that federal removal response actions will be required to restrict access to the Site and remove, package, transport and dispose of the Cobalt-60 sources from the Site.

The proposed removal action set forth in this Action Memorandum will comply with all environmental and health Applicable and Relevant and Appropriate Requirements (ARARs), to the extent practicable, considering the exigencies of the situation. The OSC made a request for the identification of ARARs to PADEP, PADCNr and the NRC on February 25, 2003.

A. Proposed Actions:

- Field support facilities (command post) to provide on-site communications, administrative support, supervision and management of cleanup personnel (e.g. trailer, phones, electrical services, etc.) as needed to facilitate day-to-day operations.
- Security and maintenance of the sealed Cobalt-60 Sources, in a manner which replaces, supplements or complements such activities currently implemented on-site by PADEP's contractor (Scientech).
- Arrange for possession of the Cobalt-60 sources by an NRC licensee during removal, packaging, transportation and disposal operations.

- Preparation of all plans and procedures required to perform the Removal Action including but not necessarily limited to, a project Work Instruction for Source Handling Activities, a Radiation Protection Plan (Health & Safety Plan), a Quality Assurance Plan, and a Transport and Disposal Plan.
- Appropriate packaging and highway conveyance for transport of the Cobalt-60 sources including all equipment and materials required for package handling and for the compliant packaging of the sources in the provided container/packaging.
- Provide radiological oversight for the removal of the Cobalt-60 sources from the source holders in the existing irradiator pool, packaging the sources into appropriate shipping containers, as required by US Department of Transportation (USDOT) Hazardous Materials regulations, and the subsequent transportation to the disposal facility.
- Prepare required USDOT Hazardous Materials shipping papers, and required NRC packaging documentation, as appropriate, for the transport of the completed radioactive materials package to the disposal facility.
- Arrange for disposal of the radioactive materials packages.
- Arrange for transport of the radioactive materials packages to the disposal facility.
- Perform all activities required to terminate use of the NRC license upon completion of disposal activities.
- Restoration of the site.
- Coordinate the transition of site control (Post-Removal Site Control), from EPA to the Commonwealth of Pennsylvania (PADCNR).

B. Estimated Costs:

The proposed distribution of funding is as follows ^A:

Estimated Removal Action Costs	\$1,000,000
Estimated Site Control Costs	\$1,000,000
Estimated Transport and Disposal Costs	\$1,000,000
Estimated Site Restoration Costs	\$1,000,000
Estimated Post-Removal Site Control Costs	\$1,000,000
Estimated Quality Assurance Costs	\$1,000,000
Estimated Health and Safety Costs	\$1,000,000
Estimated Radiation Protection Costs	\$1,000,000
Estimated Hazardous Materials Costs	\$1,000,000
Estimated Shipping and Packaging Costs	\$1,000,000
Estimated Documentation Costs	\$1,000,000
Estimated Training Costs	\$1,000,000
Estimated Insurance Costs	\$1,000,000
Estimated Contingency Costs	\$1,000,000
Estimated Total Costs	\$10,000,000

Other extramural costs not funded from the Regional Authority	
(This category of the cost is subject to State Department of Environmental Protection review)	
Subtotal:	
Subtotal:	
Extramural costs not funded (20% of Subtotal Extramural Costs)	
TOTAL REMOVAL ACTION PROJECT COSTS	
Indirect costs:	
Including:	
(a) Indirect costs (20%)	
(b) Indirect costs (20%)	
TOTAL REMOVAL ACTION PROJECT COSTS	
(Total extramural) / (Total intramural)	
TOTAL REMOVAL ACTION COSTS	
(Total extramural) / (Total intramural)	

^ As required by OSWER 9360.0-42, this footnote is included herein: Direct Costs include direct extramural costs and direct intramural costs. Indirect Costs are calculated based on an estimated indirect cost rate expressed as a percentage of site- specific direct costs, consistent with the full cost accounting methodology effective October 2, 2000. These estimates do not include pre-judgment interest, do not take into account other enforcement costs, including Department of Justice costs, and may be adjusted during the course of a Removal Action. The estimates are for illustrative purposes only and their use is not intended to create any rights for responsible parties. Neither the lack of a total cost estimate nor deviation of actual total costs from this estimate will affect the United States' right to cost recovery.

VII. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

If the actions described in this Action Memorandum are delayed, threat to human health, welfare and the environment posed by the release of radiation from the Cobalt-60 sources at the Site increases with time. If no action is taken to secure, remove, package, transport and dispose the Cobalt-60 sources, the potential for human exposure to lethal concentrations of radiation at the Site increases with time. If action is delayed or not taken, the removal of one or more of the sealed sources without detection might provide highly radioactive material for surreptitious exposure of members of the public or for a radiological dispersal device (RDD). Unless the Removal Action is completed, the imminent and substantial endangerment posed by the Site will remain unabated and the effectiveness of the Legacy Contamination remediation being conducted by the Commonwealth of Pennsylvania may also be compromised.

The Potentially Responsible Parties are not financially able to complete this action. The OSC has coordinated with Pennsylvania Department of Environmental Protection (PADEP) officials regarding the actions anticipated at the Site. PADEP is focusing on other priorities with their available funding and at the present time is not able to implement the removal actions which the OSC proposes.

EPA's financial assistance is vital to ensure that the threat posed by the Site is mitigated in a timely manner.

VIII. OUTSTANDING POLICY ISSUES

There are no outstanding policy issues pertaining to the proposed Removal Action at the PermaGrain Products, Inc. Site.

IX. ENFORCEMENT STATUS

A Potentially Responsible Party search has been conducted to determine who the viable PRPs are. See attached enforcement confidential addendum for further information.

The total EPA costs for this Removal Action based on full cost accounting practices that will be eligible for cost recovery are estimated to be \$4,742,661.

X. RECOMMENDATION

Conditions at the PermaGrain Products, Inc. Site meet the NCP Section 300.415(b)(2) criteria for a removal and the CERCLA § 104(c) emergency exemption from the \$2 million limitation, and I recommend your approval of the proposed Removal Action and \$2 million exemption. The total Removal Action Project Ceiling if approved will be \$3,000,400, of which, an estimated \$2,433,400 will be funded from the FY 2003 Regional Removal Allowance.

This decision document represents the selected Removal Action for the PermaGrain Products, Inc. Site in the Moshannon State Forest, Quehanna Wild Area, Clearfield County, Pennsylvania, developed in accordance with CERCLA, as amended, and not inconsistent with the NCP. This decision is based on the Administrative Record for the Site.

Conditions at the Site meet the criteria as defined by the NCP Section 300.415(b)(2), for a removal action and I recommend your approval of the proposed ceiling and exemption from the statutory limits. The total project ceiling will be \$3,000,400.

Approved: Alvin Fend Date 4/28/03
Director
Hazardous Sites Cleanup Division

Disapproved: _____ Date _____
Director
Hazardous Sites Cleanup Division

ATTACHMENT: Confidential Enforcement Addendum

EXHIBIT B

UNITED STATE OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:
Michael C. Farrar, Presiding Officer
Charles N. Kelber, Special Assistant

In the Matter of)	
CFC Logistics, Inc.)	Docket No. 03036239
)	ASLBP No. 03-814-01-ML
Materials License Application)	

**3rd DECLARATION OF MARVIN RESNIKOFF, Ph.D.
IN SUPPORT OF PETITIONERS' MOTION FOR A STAY**

Under penalty of perjury, I, Dr. Marvin Resnikoff, hereby declare that:

1. I am a physicist with a Ph.D. in high-energy theoretical physics from the University of Michigan and also the Senior Associate of Radioactive Waste Management Associates (RWMA), a private technical consulting firm based in New York City. I previously filed declarations in support of a stay motion. My credentials to discuss the technical issues involved in the CFC Logistics irradiator were previously stated in that declaration and will not be repeated here.
2. In the four month period since the last declaration, I have reviewed additional documents in order to prepare this declaration. I reviewed additional documents in the NRC docket referenced by NRC Staff and believe I have now reviewed all documents in the NRC docket. For the previous declaration, I also reviewed confidential court papers from the Bucks County Court suit before Judge Kenneth Biehn. In particular I reviewed the sales agreements between CFC Logistics and Gray*Star and Reviss Services, respectively. Gray*Star is the designer of the contested irradiation facility and Reviss Services is the supplier of Co-60 sources. I have also toured the irradiator facility.
3. **Prolonged Loss of Electricity.** In my previous declaration I discussed a loss of electricity accident and the fact that the licensee does not have an emergency electric generator in case of an extended power failure. I pointed out that the application fails to provide specific information regarding the heat rate and the number of hours until the source cladding degrades. The application does not contain detailed information on how rapidly the sources will heat up and the consequences of overheating. This information is needed to know how long the electricity may remain off before a serious accident ensues. In the event of overheating, the cladding around the sources could fail, contaminating the air and overloading the HEPA filters. Co-60 could be released to the external environment. This previous concern is heightened by the fact that, according

to the court papers, CFC does not have the design knowledge to repair the irradiator if an accident occurs.

4. In the February 27, 2004 Staff Response, the NRC Staff pointed out that these calculations do appear in the docket, in ADAMS ML031210348. I previously briefly noted that those calculations were inadequate and therefore I still have great concern about this safety question.
5. The calculations by Reviss that appear in ML031210348 pertain to 6 sources, 100,000 Ci Co-60 total, within a 3 inch diameter tube surrounded by water at 100 °F. From the heat production within source material, the calculation uses standard Boltzman and convection equations to determine the temperature of air within the tube and of the sources themselves. This calculation is then compared to actual temperature measurements within a shipping cask. I agree with the conclusions by Reviss for the configuration considered, but they are not applicable to the CFC Logistics configuration. It does not appear the Staff carefully evaluated this matter.
6. The CFC Logistics configuration involves 1,000,000 Ci Co-60 within a larger plenum surrounded by water at 100 °F. In this configuration, the centermost 3 inch diameter tube will be hotter than the outermost tubes. The Reviss calculations do not examine the CFC Logistics source configuration. To see whether this is important, one should consider the graph RTMxxx App.2. This graph shows the temperature of one 8.3-inch-source, rising from 160 °C at the end to 255 °C at the center. Expressed in absolute temperature (Kelvin), this corresponds to a temperature increase of 22 %. Note that the sources at CFC Logistics are organized in 55-inch-pencils containing three individual sources stacked on top of each other. It can be assumed that the maximum/minimum temperature difference within a source would increase with its length.
7. In their heat transfer model, Gray*Star calculated the average surface temperature of six sources to be 299 °C (ML031210348 at 4). They also included a maximum temperature of 338 °C, but it is not explained how this value was obtained. From the context of the calculations it appears that the maximum temperature pertains to the hottest source surface location within a single plenum pipe loaded with six sources. However, what is relevant in this context is the hottest source surface inside the plenum loaded with a total of 60 sources, distributed along the entire width and height of the plenum. Just as the temperature in the middle of a plenum pipe is greater than at the ends, the temperature in the middle of the plenum must be greater than the temperature on either side. CFC Inc. has not provided these calculations, and it is thus impossible to estimate whether or not the maximum source temperature in the center of the plenum exceeds the temperature thresholds given by Reviss. Since these temperature calculations are not in the NRC file, we assume that the NRC staff has not examined these calculations either.
8. Source surface calculations for transfer cask Reviss Model No. 3750A, the cask presumably used for the transportation of the sources (at this point, I have not seen any documents that explicitly state which cask is to be used), show that if filled to capacity

of 340 kCi, the steady-state average temperature at the source surface will reach 526 °C (ML0112105440 at 8), far above the 400 °C specified by Reviss (ML031210348 at. 2).

9. It is important to note that the sources are cooled by air circulating within the plenum, not by the water within the pool. The issue is not one of replacing pool water, but circulating air within the plenum in the absence of electricity. Petitioners will argue that the sources could degrade under high temperatures and that CFC staff do not have the design knowledge and the ability to correct the situation.
10. In addition, contrary to 10 C.F.R. §36.53(b)(6), the licensee has no emergency procedures for accidents involving a prolonged loss of electricity. In particular, CFC Logistics does not have an emergency generator. Without clear measures for recovering from a prolonged loss of electricity, the safety of neighboring members of the public cannot be assured.
11. **Cask Drop Accident.** Based on my experience with loading and unloading irradiated fuel, this stage is the most precarious and susceptible to a major accident if the equipment, training and emergency procedures were not up to this difficult task. According to the license application, a shipping cask containing up to 200,000 Ci of Co-60 sources would be inserted into the pool. Sources would be removed and placed underwater on one side of the pool, away from the cask. The plenum would be removed before this operation. The shipping cask could drop onto the sources, seriously contaminating the pool water. This contamination would have to be removed with ion exchange columns that would become extremely radioactive. The steel-liner of the pool would become radioactively contaminated. Some of this radioactivity could be released to the sanitary sewers and the air.
12. A cask drop accident could occur during loading of Co-60 into the proposed facility. It could also occur during removal of the sources from the pool. If the sources were bent out of shape it might not be possible to return them to the shipping cask for removal. Since the 0.38-inch-diameter sources are not designed to carry any weight other than their own (ML0306300360 at 24), they would be easily crushed/deformed by a cask that weighs several tons.
13. In my opinion, a cask drop accident could seriously contaminate the pool and lead to water contamination and air contamination that could be ventilated to the external environment. Given that some residents live as close as a quarter mile from the proposed facility, the resulting contamination could adversely affect public health. It would also be very expensive to clean up.
14. Following a discussion with CFC Logistics staff, it is clear that the control to prevent this type of accident is entirely administrative. The crane is not single failure proof; during loading or unloading operations, the cask can directly pass over the unprotected sources at the bottom of the pool. Only operator diligence and competence prevents an accident. This situation also directly contravenes 10 CFR 36.39(c), that requires that the facility be designed such that "a dropped cask would not fall on sealed sources."

15. **Check valve.** I have reviewed the Staff and CFC submissions concerning the deletion and replacement of the check valve. According to CFC Logistics, the check valve removal was designed to increase efficiency. While this may be true, a matter of safety was also involved, as stated by Reviss. The check valve allowed for the ready removal of water from the plenum. Reviss did not want water to enter the plenum because of its concern for corrosion of the sources. The staff states the sources are designed for either wet or dry environments. But the staff completely misses the point here. We are not concerned with wet or dry; we are concerned with a steam environment that is not presented with other types of irradiators. This directly relates to the prototypical and experimental nature of this system, discussed in my previous declaration. CFC Staff has not responded to the other prototype developmental issues. The rule of science and engineering is that new systems have an infinite number of possible problems, and the check valve reversals are consistent with a situation in which there is no established scientific methodology. To the contrary, it shows a trial and error situation.
16. **Decommissioning Funds.** I pointed out previously that contrary to 10CFR30.35(e), the applicant does not have a cost estimate for decommissioning. "Each decommissioning funding plan must contain a cost estimate for decommissioning and a description of the method of assuring funds for decommissioning from paragraph (f) of this section, including means for adjusting cost estimates and associated funding levels periodically over the life of the facility." I am aware that the applicant has posted \$75,000 financial assurance and that the staff will require an additional amount. My concern here is that the company has not posted sufficient funds to decommission the facility in case of an accident.
17. The staff has argued that the Permagrain, West Valley and NMI/Starmet situations are not applicable to the CFC Logistics irradiator. Of course there are differences that the staff highlights, but the staff has to come to terms with their own failures, that have left taxpayers with huge costs that should have been borne by the companies. Region 1 and specifically staff John Kinneman have been notably lax in requiring licensees to accurately estimate decommissioning costs and to provide the necessary financial assurance. Without the ready availability of cash, companies cannot easily recover in case of an accident and the community is at peril. For 15 years, the NRC was aware that the NMI/Starmet facility in Concord, Massachusetts had contaminated the underlying aquifer, yet it was never able to obtain the necessary financial assurance from the company; the federal government may have to put up over \$10 million for remediation of the facility. This is clearly an issue that must be removed from staff's hands and be put before the hearing officer.
14. If the petitioners' concerns are admitted for evidentiary hearing, I would testify regarding my opinion in support of these conclusions. The technical facts and analyses described above provide an abstract of the testimony I would give, based on the information that has been furnished to date. I would expect to be able to expand upon and refine my testimony, after having an opportunity to review materials produced by CFC and the NRC Staff.

I declare under penalty of perjury that the factual information provided above is true and correct to the best of my knowledge and belief, and that the professional opinions expressed above are based on my best professional judgment.

Executed on this 17th day of March, 2004.

Dr. Marvin Resnikoff, Senior Associate
Radioactive Waste Management
526 West 26th Street, Room 517
New York, NY 10001
Phone (212) 620-0526
Fax (212) 620-0518

SUGARMAN & ASSOCIATES, PC

ATTORNEYS AT LAW
ROBERT MORRIS BUILDING - 11TH FLOOR
100 NORTH 17TH STREET
PHILADELPHIA, PENNSYLVANIA 19103

ROBERT J. SUGARMAN *

215-864-2500 • FAX: 215-864-2501
EMAIL: RJSUGARMAN@AOL.COM

BUCKS COUNTY OFFICE
122 NORTH MAIN STREET
DOYLESTOWN, PA 18901

DEBBIE L. GOLDBERG
HEATHER R. BRINTON
JENNIFER A. MURPHY**

215-348-8786 • FAX: 215-230-1922

*Also admitted in NY, DC
**Also admitted in NJ

April 2, 2004

VIA ELECTRONIC MAIL, FACSIMILE AND U.S. FIRST CLASS MAIL

Administrative Judge Michael C. Farrar
Presiding Officer
Atomic Safety and Licensing Board Panel
U. S. Nuclear Regulatory Commission
Washington, DC 20555-0001

U.S. Nuclear Regulatory Commission
Office of the Secretary
Attn: Rulemaking and Adjudications Staff
One White Flint North
11555 Rockville Pike
Rockville, MD 20852

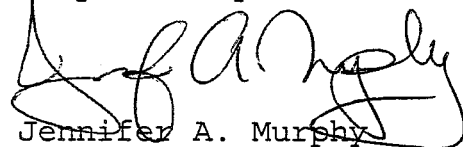
RE: CFC Logistics, Inc.
Docket No. 30-36239-ML
ASLBP No. 03-814-01-ML

Dear Judge Farrar and Secretary:

Please find enclosed Intervenors' Reply to Supplemental Briefs
Regarding Decommissioning Financial Assurance in the above-
captioned matter.

Thank you for your consideration.

Respectfully,


Jennifer A. Murphy

Enclosure

cc: Stephen Lewis, Esquire
Anthony Thompson, Esquire