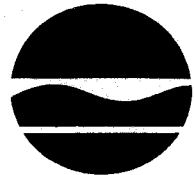


New York State Department of Environmental Conservation
Division of Solid and Hazardous Materials
Bureau of Radiation & Hazardous Site Management
Radiation Section, Room 402
50 Wolf Road, Albany, New York 12233-7255
Phone: (518) 457-2225 **FAX:** (518) 485-8390
Website: www.dec.state.ny.us



John P. Cahill
Commissioner

Mr. Timothy E. Byrnes
Project Manager
U.S. Army Engineering District, Buffalo District
1776 Niagara Street
Buffalo, New York 14207-3199

Dear Mr. Byrnes:

Enclosed is the New York State Department of Environmental Conservation's Technical Progress reports on the FUSRAP oversight program, for the first, second and third quarters of Federal Fiscal Year 1999. In accordance with the Cooperative Agreement these reports cover the period of time from October 1, 1998 to December 30, 1998, January 1, 1999 to March 31, 1999 and April 1, 1999 to June 30, 1999, respectively.

Please call John I. Mitchell, of this Bureau at (518) 457-2225, if there are any questions.

Sincerely,

Barbara Youngberg
Chief, Radiation Section
Bureau of Radiation & Hazardous Site Management
Division of Solid & Hazardous Materials

Enclosures

cc: w/encl. - Col. W. Pearce, USACE, New York District
Lt. Col. M. Feierstein, USACE Buffalo District

SUPP_008121

**Bureau of Radiation & Hazardous Site Management
Division of Solid & Hazardous Materials
New York State Department of Environmental Conservation
Albany, New York 12233-7255**

**FUSRAP Oversight Program
Technical Progress Report to the
United States Army Corps of Engineers**

October 1 to December 30, 1998

The following activities have been completed with funding from the United States Army Corps of Engineers.

1. Monitoring/Sampling:

Colonie Interim Storage Site (Colonie, New York): The Radiation Section staff continued to perform air monitoring, and participated in the collection of soil samples from test pits in the Patroon Lake area.

Tonawanda Sites (Tonawanda, New York) Ashland 2: Radiation Section staff continued to perform air monitoring at the Ashland 2 site. Radiation Section staff, in the spirit of cooperation, continued working with the United States Army Corps of Engineers (USACE) and their contractor, ICF Kaiser, as they continued the process of determining whether the remediated areas met the site's clean-up criteria, as presented in the Record of Decision (ROD). Our efforts were directed towards performing a radiological survey and collecting split unbiased soil samples, as derived by ICF Kaiser using the Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM) approach, and biased soil samples from each survey unit. During this quarter we completed survey units 19, 1, 4, 12, 13, 17, 9, 8, 7, 3 and 22. We provided our data to the USACE as it became available.

Tonawanda Sites (Tonawanda, New York) -- Niagara Landfill (Seaway Landfill): The Radiation Section had planned on collecting confirmatory samples during BFI's July 22, 1998 monitoring; however, when background counting the Lucas cells, it was discovered that our system was broken. The system is now repaired and in December, we participated in Bowser-Morner, Inc. Second Annual American Association of Radon Scientists and Technologists intercomparison exercise.

2. Documents Reviewed:

Site Plans:

Bliss & Laughlin Site (Buffalo, NY): Radiation Section staff reviewed and commented on the Former Bliss & Laughlin Site Proposed Plan (September 1998), agreeing to the use of Alternative 3 (Decontamination of Buildings) as the preferred cleanup alternative. We commented that a soil cleanup guideline needs to be developed in case subsurface soil contamination is discovered. In addition, we encouraged the use of an independent contractor to verify that the criteria established in the Record of Decision have been met. These comments were submitted on October 27, 1998.

On November 24, 1998 Radiation Section staff submitted our comments on the *Draft Projects Plans, Remediation of Bliss & Laughlin Steel Company Site, Buffalo, New York* (November 13, 1998) and *Draft Site Safety and Health Plan, Remediation of Bliss & Laughlin Steel Company Site, Buffalo, New York* (November 11, 1998).

Radiation Section staff reviewed and commented on the November 1998 Draft Record of Decision, which included the Responsiveness Summary and a Technical Memorandum - Cleanup Goals For The Soil At The Finishing Area Of The Former Bliss & Laughlin Facility. In a December 8, 1998, letter we stated that based on our dose modeling the proposed clean-up concentration of 100 pCi/gm under a residential, commercial/industrial or construction scenario for this site would result in doses below our TAGM 4003 goal of 10 mrem/yr additional exposure.

Colonie Interim Storage Site (Colonie, NY): Radiation Section staff reviewed and commented on ICF Kaiser's *Draft Sampling and Analysis Plan, Volumes 1 & 2* (November 10, 1998), *Operations Work Plan, Volumes 1 & 2* (November 11, 1998), *Regulatory Plan* (November 10, 1998) and the *Final Status Survey Plan* (November 1998). Those comments were submitted on December 15, 1998, December 16, 1998, December 16, 1998 and December 16, 1998, respectively.

Tonawanda Sites (Tonawanda, NY) -- Ashland 2: Radiation Section staff reviewed and commented on the Draft Final Status Survey Reports for MARSSIM survey units 1, 2A, 2B and 19. Those comments were submitted on November 25, 1998. We suggested that each report be essentially a stand alone report documenting the entire process for that survey unit including the gamma walkover survey performed by the USACE.

Tonawanda Sites (Tonawanda, NY) -- Seaway Landfill: Radiation Section staff reviewed and commented on the draft *Quality Assurance Project Plan For Additional Surface Characterization at the Seaway Site Areas B & C* (December 8, 1998) and draft *Sampling And Analysis Plan For Additional Surface Characterization at the Seaway Site Areas B & C* (December 8, 1998). Those comments were submitted on December 11, 1998. Our main comment focused on the interval of sample collection.

These comments resulted in a meeting between USACE, SAIC and Radiation Section staff on December 14, 1998.

Engineering Evaluation/Cost Analysis: None

3. Meetings Attended:

FUSRAP General (Albany, New York): On October 20, 1998, Radiation Section staff, representatives of the New York State Attorney General's office and representatives of the USACE met to discuss regulatory issues as they relate to the FUSRAP sites in New York State. Discussions included topics such as licensing and USACE QA/QC procedures.

Colonie Interim Storage Site (Colonie, New York): Radiation Section staff continued to attend the weekly progress meetings for the Colonie Interim Storage Site. These meetings are being held at the CISS to discuss various aspects of onsite activities.

Tonawanda Sites (Tonawanda, NY) -- Ashland 2: On November 19, 1998, Radiation Section staff attended a USACE Informational Session on Ashland 2. This informational session gave an opportunity for interested citizens to meet informally with the USACE to discuss current and future remedial actions at the Ashland 2 site.

On December 17, 1998 Radiation Section staff attended a USACE Lessons Learned meeting which focused on Ashland 2 but had general application to current and future remedial activities at other USACE sites. Discussions focused on both positive aspects of the remediation and on areas which could have been improved.

Tonawanda Sites (Tonawanda, NY) -- Seaway Landfill: On December 14, 1998, Radiation Section staff met with USACE and SAIC staff to discuss our comments on the Sampling and Analysis Plan for the additional surface characterization at the Seaway Landfill.

4. Correspondence:

Colonie Interim Storage Site (Colonie, New York): On November 10, 1998, Radiation Section staff approved ICF Kaiser's request to move their and our westerly air sampling stations further to the north. The Radiation Section staff, on November 12, 1998, wrote a letter to the USACE regarding the continuance of working at the Colonie Interim Storage Site (CISS) without approved work plans. In addition, we provided information to the USACE regarding whether the areas where the power poles were to be relocated were adequately remediated by the USDOE.

Tonawanda Sites (Tonawanda, NY) -- Ashland 1 & 2: On December 8, 1998, Radiation Section staff sent the USACE Buffalo District a letter transmitting our contracted

laboratory's analytical data from the Ashland 2 survey units 1' and 19. We informed the USACE that there were no sampling locations exceeding the 40 pCi/gm clean-up guideline value.

FUSRAP General Cooperative Agreement: On October 19, 1998, Radiation Section staff had a conference call with the Buffalo District USACE staff and Mr. Thomas Hempfling of the Great Lakes and Ohio River District of the USACE about the proposed Cooperative Agreement. As a follow up, Mr. Thomas Hempfling, Buffalo District USACE staff and Department of Environmental Conservation staff had a meeting on October 21, 1998 on specific issues which needed to be resolved. As a result of those discussions we were given another revision in early November 1998. We gave our comments on that draft to the USACE on December 23, 1998.

5. On-site Visits:

Colonie Interim Storage Site (Colonie, New York):

<u>Date</u>	<u>Purpose of Visit</u>
October 5, 1998	Change air filters
October 8, 1998	Weekly Meeting
October 15, 1998	Weekly Meeting
October 19, 1998	Change air filters
October 21, 1998	Weekly Meeting
October 26, 1998	Change air filters
November 2, 1998	Change air filters
November 4, 1998	Weekly Meeting
November 9, 1998	Change air filters
November 10, 1998	Weekly Meeting
November 17, 1998	Change air filters, Weekly Meeting
November 23, 1998	Change air filters
November 24, 1998	Weekly Meeting
November 30, 1998	Change air filters
December 2, 1998	Weekly Meeting
December 7, 1998	Change air filters
December 9, 1998	Weekly Meeting
December 14, 1998	Change air filters
December 15 & 16, 1998	Collect soil samples in test pits
December 26, 1998	Collect air filters

Tonawanda Sites (Tonawanda, New York) Ashland 2:

<u>Date</u>	<u>Purpose of Visit</u>
October 1-2, 1998	Perform radiological survey on Survey Unit 19, collect soil samples
October 13 - 14, 1998	Site Visit, Collect air filters
November 16- 20, 1998	Perform radiological survey on Survey Units 1', 4, 12, 19 and 13, collect soil samples, Change air filters
December 14 - 18, 1998	Perform radiological survey on Survey Units 17, 9, 8, 7, 3 and 22, collect soil samples, Change air filters

Tonawanda Sites (Tonawanda, New York) -- Niagara Landfill (Seaway Landfill):

<u>Date</u>	<u>Purpose of Visit</u>
December 16, 1998	Observe SAIC Geoprobe activities

Tonawanda Sites (Tonawanda, NY) -- Praxair Incorporated (Linde Air Products):

<u>Date</u>	<u>Purpose of Visit</u>
October 14, 1998	Site visit to observe progress on Bldg 30 dismantlement

Estimate of Financial Expenditures

Personnal Services			
Buffalo District			\$ 38,399
New York District			\$ 26,468
Travel			
Lodging and Per Diem			
Buffalo, New York			\$2552
Colonie, New York			\$ 0
Transportation			
Buffalo	October		\$ 103.00
	November		\$ 104.00
	December		\$ 130.00
Colonie	October		\$ 1.00
	November		\$ 1.00
	December		\$ 4.00

Sample Analysis Costs

District/Site	Number of Samples	Cost
Buffalo		
Ashland 2	92 samples	\$ 20,360
New York		
Colonie	4 samples	\$ 1,320

**Bureau of Radiation & Hazardous Site Management
Division of Solid & Hazardous Materials
New York State Department of Environmental Conservation
Albany, New York 12233-7255**

**FUSRAP Oversight Program
Technical Progress Report to the
United States Army Corps of Engineers**

January 1 to March 31, 1999

The following activities have been completed with funding from the United States Army Corps of Engineers.

1. Monitoring/Sampling:

Colonie Interim Storage Site (Colonie, New York): The Radiation Section staff continued to perform air monitoring, but only until January 11, 1999. The main reason for the suspension of air sampling was due to equipment failure. Once both air samplers are refurbished and recalibrated, they will be deployed again at the site. The soil samples collected from the test pits in the Patroon Lake area were analyzed.

Tonawanda Sites (Tonawanda, New York) Ashland 2: Radiation Section staff continued to perform air monitoring at the Ashland 2 site until March 17, 1999. Radiation Section staff, in the spirit of cooperation, continued working with the United States Army Corps of Engineers (USACE) and their contractor, ICF Kaiser, as they continued the process of determining whether the remediated areas met the site's clean-up criteria, as presented in the Record of Decision (ROD). Our efforts were directed towards performing a radiological survey and collecting split unbiased soil samples, as derived by ICF Kaiser using the Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM) approach, and biased soil samples from each survey unit. This quarter we completed survey units 14, 20, 10, 11, 15, 16, 16A, 23 and 21. We provided our data to the USACE as it became available.

Tonawanda Sites (Tonawanda, New York) -- Niagara Landfill (Seaway Landfill): In February, we received the results of our participation in Bowser-Morner, Inc. Second Annual American Association of Radon Scientists and Technologists intercomparison exercise. Our average relative percent error +/- 95% confidence interval was -3.5% +/- 14.2%.

Niagara Falls Storage Site (Lewiston, New York): Radiation Section staff, on January 20, 1999, replaced the Section's thermoluminescent dosimeters (TLD) with new ones. Once back at the office, Radiation Section staff processed the collected TLDs. This information will be entered into a spread sheet and normalized to a 90-day period.

2. Documents Reviewed:

Site Plans:

Bliss & Laughlin Site (Buffalo, NY): Radiation Section staff reviewed and commented on the Former Bliss & Laughlin Site Final Status Survey Plan (December 30, 1998). These comments were submitted on January 21, 1999.

Tonawanda Sites (Tonawanda, NY) -- Linde: Radiation Section staff reviewed and commented on the draft Technical Memorandum Linde Site Radiological Assessment Tonawanda, New York (January 1999), Draft Addendum to the Feasibility Study for the Linde Site, Tonawanda, New York (January 1999), Post Remedial Action Report for Building 14 at the Linde Site, Tonawanda, New York (November 1998) and the Synopsis of Historical Information on Linde Effluent Injection Wells (January 19, 1999). Those comments were submitted on March 10, 1999.

Niagara Falls Storage Site (Lewiston, New York): Radiation Section staff reviewed and commented on the draft Scope of Work - Remedial Investigation/Feasibility Study/Proposed Plan for the Niagara Falls Storage Site, Lewiston, New York. Those comments were submitted on February 22, 1999.

Engineering Evaluation/Cost Analysis: None

3. Meetings Attended:

Colonie Interim Storage Site (Colonie, New York): Radiation Section staff continued to attend the weekly progress meetings for the Colonie Interim Storage Site (CISS). These meetings, between the USACE, DEC and the contractor, are being held to have open discussions about various aspects of onsite activities. In addition, Radiation Section staff were invited, and attended, the USACE's Quality Control & Quality Assurance Training in New York City on March 11 & 12, 1999.

Tonawanda Sites (Tonawanda, NY) -- Ashland 1: On March 16, 1999, Radiation Section staff attended a partnering meeting on Ashland 1. This meeting helped the stakeholders understand each others' roles in the project and what each stakeholder expected of the outcome of the cleanup.

Tonawanda Sites (Tonawanda, NY) -- Ashland 2: On February 26, 1999, Radiation Section staff met with USACE staff to discuss the current status of the Ashland 2 cleanup. Discussions centered on what survey units have been completed and what survey units need to be finished both from the construction and analysis aspect.

Tonawanda Sites (Tonawanda, NY) -- Linde: On February 26, 1999, Radiation Section staff met with USACE staff to discuss the Linde site. This meeting was held to discuss some of the reports we have received for review and comment. In addition, a time frame was presented which outlined general milestones.

Tonawanda Sites (Tonawanda, NY) -- Seaway Landfill: On February 25, 1999, Radiation Section staff attended a meeting to discuss the Seaway site. The USACE presented a summary of historical information, the status of recent activities (additional characterization), and an overview of possible alternatives. A similar meeting was held in the evening for the general public.

Niagara Falls Storage Site (Lewiston, NY): Radiation Section staff, on March 2, 1999, attended an Information Session on the Niagara Falls Storage Site. At this meeting a schedule of milestones was presented.

4. Correspondence:

Bliss & Laughlin Site (Buffalo, NY): On March 31, 1999, Radiation Section staff sent the USACE Buffalo District a letter transmitting our contracted laboratory's analytical data from the split samples collected on March 14, 1999. We informed the USACE that there were no analytical results above the agreed to 100 pCi/gm Uranium clean-up guideline value.

Tonawanda Sites (Tonawanda, NY) -- Ashland 2: On March 15, 1999, March 23, 1999, and again on March 31, 1999, Radiation Section staff sent the USACE Buffalo District letters transmitting our contracted laboratory's analytical data from the Ashland 2 site. We informed the USACE that there were some sampling locations which exceeded the 40 pCi/gm clean-up guideline value. We asked the USACE to verify whether these areas were remediated.

Tonawanda Sites (Tonawanda, NY) -- Linde: On January 21, 1999, Radiation Section staff responded to Radian's responses to DEC's comments on the Linde Building 30 Demolition Plan. We found the timeliness of the responses and some of the responses themselves unacceptable.

FUSRAP General Cooperative Agreement: As a result of previous discussions with Buffalo District and Mr. Thomas Hempfling, of the Great Lakes and Ohio River District of the USACE, we were given another revision in mid-January 1999. This new revision resulted in additional discussions throughout the remainder of the quarter.

5. On-site Visits:

Bliss & Laughlin Site (Buffalo, NY):

<u>Date</u>	<u>Purpose of Visit</u>
January 2-3, 1999	Perform a radiological survey

Colonie Interim Storage Site (Colonie, New York):

<u>Date</u>	<u>Purpose of Visit</u>
January 4, 1999	Change air filters
January 6, 1999	Weekly Meeting
January 11, 1999	Change air filters
January 13, 1999	Weekly Meeting
January 20, 1999	Weekly Meeting
February 3, 1999	Weekly Meeting
February 10, 1999	Weekly Meeting
February 17, 1999	Weekly Meeting
February 24 - 25, 1999	Weekly Meeting
March 4, 1999	Weekly Meeting
March 16, 1999	Weekly Meeting
March 18, 1999	Weekly Meeting
March 25, 1999	Weekly Meeting
March 30 - 31, 1999	Observe remedial activities in the Designated Area

Niagara Falls Storage Site (Lewiston, New York)

<u>Date</u>	<u>Purpose of Visit</u>
January 20 - 21, 1999	Deploy TLDs

Tonawanda Sites (Tonawanda, New York) Ashland 2:

<u>Date</u>	<u>Purpose of Visit</u>
January 21, 1999	Change air filters
January 26 - 28, 1999	Site visit
February 23 - 26, 1999	Perform radiological survey on Survey Units 14, 20, 10 and 11; collect soil samples and Change air filters
March 2 - 5, 1999	Perform radiological survey on Survey Units 15, 16, 16A, 23 and 21

Estimate of Financial Expenditures

Personnal Services

Buffalo District \$ 33,637

New York District \$ 20,651

Travel

Lodging and PerDiem

Buffalo, New York \$ 2390.00

Colonie, New York \$ 409.45 (to attend training in NYC)

Transportation

Buffalo	January	\$ 164.00
	February	\$ 246.00
	March	\$ 194.00

Colonie	January	\$ 0
	February	\$ 0
	March	\$ 0

Sample Analysis Costs

District/Site	Number of Samples	Cost
Buffalo		
Ashland 2	31 samples	\$ 13,640
New York		
Colonie	0 Samples	

**Bureau of Radiation & Hazardous Site Management
Division of Solid & Hazardous Materials
New York State Department of Environmental Conservation
Albany, New York 12233-7255**

**FUSRAP Oversight Program
Technical Progress Report to the
United States Army Corps of Engineers**

April 1 to June 30, 1999

The following activities have been completed with funding under the Cooperative Agreement from the United States Army Corps of Engineers.

1. Monitoring/Sampling:

Tonawanda Sites (Tonawanda, New York) Ashland 1: Radiation Section staff repaired and deployed air monitoring equipment at the Ashland 1 site.

Tonawanda Sites (Tonawanda, New York) Ashland 2: Radiation Section staff, in the spirit of cooperation, continued working with the United States Army Corps of Engineers (USACE) and their contractor, ICF Kaiser, as they continued the process of determining whether the remediated areas met the site's clean-up criteria, as presented in the Record of Decision (ROD). Our efforts were directed towards performing radiological surveys and collecting split unbiased soil samples and biased soil samples from each survey unit as derived by ICF Kaiser using the Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM) approach. This quarter we completed survey 24. We have continued to share our data as it becomes available.

2. Documents Reviewed:

Proposed Plans:

Tonawanda Sites (Tonawanda, NY) -- Linde: Radiation Section staff reviewed and commented on the Proposed Plan for the Linde Site, Tonawanda, New York (March 1999). The major problems included the following: the proposed uranium cleanup criterion of 600 pCi/g is unacceptable; the Corps has not demonstrated that the 15 pCi/g radium-226 criterion is justified; the proposed plan does not include the use of an Independent Verification Contractor; and the methods the Corps plans to use to

determine compliance with the cleanup criteria were not defined. Additional comments were attached. Those comments were submitted on April 30, 1999.

Site Plans:

Niagara Falls Storage Site (Lewiston, New York): Radiation Section staff reviewed and commented on the draft Scope of Work - Remedial Investigation/Feasibility Study/Proposed Plan for the Niagara Falls Storage Site, Lewiston, New York. Those comments were submitted on February 22, 1999.

Engineering Evaluation/Cost Analysis: None

3. Meetings Attended:

Colonie Interim Storage Site (Colonie, New York): Radiation Section staff continued to attend the weekly progress meetings for the Colonie Interim Storage Site (CISS). These meetings, between the USACE, DEC and the contractor, are being held to have open discussions about various aspects of onsite activities. These meetings are still continuing on a weekly basis.

Tonawanda Sites (Tonawanda, NY) -- Ashland 2: The first half of the April 27, 1999 CANiT meeting was devoted to a presentation by the USACE on the current status of the Ashland 2 remediation.

Tonawanda Sites (Tonawanda, NY) -- Linde: On April 22, 1999 and again on May 27, 1999 Radiation Section staff attended the USACE public hearing on the proposed plan for the Linde site. On April 27, 1999 Radiation Section staff attended a CANiT meeting where during the second half of the meeting the USACE presented additional information on the proposed plan for the Linde site.

Tonawanda Sites (Tonawanda, NY) -- Town of Tonawanda Landfill: On June 4, 1999, Radiation Section staff attended a meeting between the USACE, Town of Tonawanda and DEC region 9 to discuss the Town of Tonawanda Landfill. At this meeting the possibility of the Town handling the FUSRAP material at the landfill as part of its closure was discussed. We suggested that a proposal be presented to our Bureau and that a decision would be made.

Niagara Falls Storage Site (Lewiston, NY): Radiation Section staff, on March 2, 1999, attended an Information Session on the Niagara Falls Storage Site. At this meeting a schedule of milestones was presented.

4. Correspondence:

Bliss & Laughlin Site (Buffalo, NY): Radiation Section received a response on April 8, 1999 to our December 31, 1999 letter which requested that the USACE amend the