Norfolk
17 Lawrence St
3-0173

SCANNED

Buckley & Mann, Inc.
14 Bush Pond Road
Norfolk, MA 02056
March 31, 1999

Department of Environmental Protection
Northeast Regional Office
205 Lowell Street
Wilmington, MA 01887

Enclosed please find a semi-annual Status Report for the Release Abatement Measure at the Buckley & Mann property in Norfolk, Massachusetts. The site is Bureau of Waste Site Cleanup #3-0173.

If you have any questions, please contact us at (781) 828-0029, X3442.

Sincerely,

Richard D. Mann

RELEASE ABATEMENT MEASURE (RAM) PLAN STATUS REPORT
for
BUCKLEY & MANN, INC., NORFOLK, MASSACHUSETTS

BUREAU OF WASTE SITE CLEAN-UP SITE NUMBER 3-0173

Prepared by

CAMP DRESSER & McKEE INC.
CAMBRIDGE, MASSACHUSETTS

March 1999

Robert A. Dangel
Licensed Site Professional # 7798

William R. Swanson
Licensed Site Professional # 6406

RELEASE ABATEMENT MEASURE (RAM) PLAN STATUS REPORT
BUCKLEY & MANN, INC., NORFOLK, MASSACHUSETTS
BUREAU OF WASTE SITE CLEAN-UP SITE NUMBER 3-0173

1. Previous filing

The original RAM Plan was filed on May 28, 1996, and the revised RAM plan was filed in December 1997. The previous RAM Status report was filed in September 1998.

2. Work since the last report

In December 1998, B&M filed for a Tier II extension. The Release Abatement Status Report filed with the extension request described the work completed in 1998, including:

- Completion of the contaminated-soils excavation and sorting from Areas 3, 5, 6 , 7 and 10, consolidation of this material in Area 10, and construction of a clean sand cover.

- Sampling and analysis of soil in the area east of the cover, and confirmation that the soil contaminant concentrations did not exceed the applicable MCP Method 1 limits.

- Sampling and analysis of groundwater monitoring wells, and confirmation that the groundwater contaminant concentrations (where present) did not exceed the applicable MCP Method 1 limits.

3. Work planned

The following tasks remain to complete the work in 1999:

- Remove approximately 50 cubic yards of contaminated soil from Area 5 and place the material under the Area 10 cover. This material was overlooked in the May and June 1998 remediation work.

- Add approximately 2,000 cubic yards additional sand and a loam layer to complete the three foot thick cover over the consolidation area, followed by hydroseeding.

- Obtain a Certificate of Compliance from the Norfolk Conservation Commission.

- Complete an Activity and Use Limitation and file the appropriate completion reports with the Department of Environmental Protection.

Massachusetts Department of Environmental Protection **BWSC-106**
Bureau of Waste Site Cleanup

RELEASE & UTILITY-RELATED ABATEMENT MEASURE (RAM & URAM) TRANSMITTAL FORM

Pursuant to 310 CMR 40.0444 - 0446 and 310 CMR 40.0462 - 0465 (Subpart D)

Release Tracking Number: 3 - 173

A. SITE LOCATION:

Site Name: (optional) Buckley and Mann Inc.

Street: 17 Lawrence Street Location Aid: Bush Pond

City/Town: Norfolk, Massachusetts ZIP Code: 02056-0000

☐ Check here if a Tier Classification Submittal has been provided to DEP for this Release Tracking Number.

Related Release Tracking Numbers That This RAM or URAM Addresses:

B. THIS FORM IS BEING USED TO: (check all that apply)

☐ Submit a **RAM Plan** (complete Sections A, B, C, D, E, F, J, K, L and M).

☐ Check here if this RAM Plan is an update or modification of a previously approved written RAM Plan. Date Submitted:

☑ Submit a **RAM Status Report** (complete Sections A, B, C, E, J, K, L and M).

☑ Submit a **RAM Completion Statement** (complete Sections A, B, C, D, E, G, J, K, L and M).

☐ Confirm or Provide **URAM Notification** (complete Sections A, B, H, K, L and M).

☐ Submit a **URAM Status Report** (complete Sections A, B, C, E, J, K, L and M).

☐ Submit a **URAM Completion Statement** (complete Sections A, B, C, D, E, I, J, K, L and M).

RECEIVED
APR 5 1999
DEP/NORTHEAST REGION
WOBURN, MASS.

You must attach all supporting documentation required for each use of form indicated, including copies of any Legal Notices and Notices to Public Officials required by 310 CMR 40.1400.

C. SITE CONDITIONS:

☑ Check here if the source of the Release or Threat of Release is known.

If yes, check all sources that apply: ☐ UST ☐ Pipe/Hose/Line ☐ AST ☐ Drums ☐ Transformer ☐ Boat ☐ Tanker Truck ☐ Vehicle ☑ Other Specify: Bldg. debris, coal ash and textile plant wastes

Identify Media and Receptors Affected: (check all that apply) ☐ Air ☐ Groundwater ☐ Surface Water ☐ Sediments ☑ Soil ☐ Wetlands ☐ Storm Drain ☐ Paved Surface ☐ Private Well ☐ Public Water Supply ☐ Zone 2 ☐ Residence ☐ School ☐ Unknown ☐ Other Specify:

Identify Release and/or Threat of Release Conditions at Site: (check all that apply)

☐ 2 and 72 Hour Reporting Condition(s) ☑ 120 Day Reporting Condition(s) ☐ Other Condition(s)

Describe: Metals, PAH and TPH from building debris, coal ash and textile plant wastes

RAMs may be conducted concurrently with an IRA only with written DEP approval
URAMs may not be conducted if any 2 or 72 Hour conditions exist at the site.

Identify Oils and Hazardous Materials Released: (check all that apply) ☐ Oils ☐ Chlorinated Solvents ☑ Heavy Metals ☑ Others Specify: PAH and TPH

D. DESCRIPTION OF RESPONSE ACTIONS: (check all that apply)

☐ Assessment and/or Monitoring Only

☑ Excavation of Contaminated Soils

☐ Re-use, Recycling or Treatment

○ On Site ○ Off Site Est. Vol.: _____ cubic yards

Describe: _____

☐ Store ○ On Site ○ Off Site Est. Vol.: _____ cubic yards

☐ Deployment of Absorbant or Containment Materials

☐ Temporary Covers or Caps

☐ Bioremediation

☐ Soil Vapor Extraction

☐ Structure Venting System

☐ Product or NAPL Recovery

SECTION D IS CONTINUED ON THE NEXT PAGE.

RELEASE & UTILITY-RELATED ABATEMENT MEASURE (RAM & URAM) TRANSMITTAL FORM

Pursuant to 310 CMR 40.0444 - 0446 and 310 CMR 40.0462 - 0465 (Subpart D)

Release Tracking Number: 3 - 173

D. DESCRIPTION OF RESPONSE ACTIONS (continued):

- [x] Landfill ( ) Cover (x) Disposal Est. Vol.: 315 cubic yards
- [ ] Removal of Drums, Tanks or Containers
  - Describe:
- [ ] Removal of Other Contaminated Media
  - Specify Type and Volume:
- [x] Other Response Actions Describe: On site consolidation and covering of 4,550 cy soil
- [ ] Groundwater Treatment Systems
- [ ] Air Sparging
- [ ] Temporary Water Supplies
- [ ] Temporary Evacuation or Relocation of Residents
- [ ] Fencing and Sign Posting

See 310 CMR 40.0442 for limitations on the scope and type of RAMs.
See 310 CMR 40.0464 for performance standards for URAMs.

- [ ] Check here if this RAM or URAM involves the use of Innovative Technologies. DEP is interested in using this information to aid in creating an Innovative Technologies Clearinghouse.
  - Describe Technologies:

E. TRANSPORT OF REMEDIATION WASTE:

(if Remediation Waste has been sent to an off-site facility, answer the following questions)

Name of Facility: Chemical Waste Management -Turnkey Facility

Town and State: Rochester, NH

Quantity of Remediation Waste Transported to Date: 315 tons

F. RAM PLAN:

- [ ] Check here if this RAM Plan received previous oral approval from DEP as a continuation of a Limited Removal Action (LRA).
  - Date of Oral Approval:
- [ ] If a RAM Compliance Fee is required, check here to certify that the fee has been submitted. You **MUST** attach a photocopy of the payment. See 310 CMR 40.0444(2) to learn when a fee is not required.
- [ ] Check here if the RAM Plan is proposed for a Transition Site. If this is the case, you may need to attach an LSP Evaluation Opinion prior to undertaking the RAM, if not previously provided. See 310 CMR 40.0600 for further information about Transition Sites.

G. RAM COMPLETION STATEMENT:

- [ ] If a RAM Compliance Fee is required in connection with submission of the RAM Completion Statement, check here to certify that the fee has been submitted. You **MUST** attach a photocopy of the payment. You owe this fee when submitting a RAM Completion Statement if you received oral approval of a RAM that continued an LRA, and have NOT previously submitted a RAM Plan and accompanying fee.

If any Remediation Waste will be stored, treated, managed, recycled or reused at the site following submission of the RAM Completion Statement, you must submit a Phase IV Remedy Implementation Plan, along with the appropriate transmittal form, as an attachment to the RAM Completion Statement.

H. URAM NOTIFICATION:

Identify Location Type: (check all that apply)
- [ ] Public Right of Way
- [ ] Utility Easement
- [ ] Private Property

Identify Utility Type: (check all that apply)
- [ ] Sanitary/Combined Sewerage
- [ ] Water
- [ ] Drainage
- [ ] Natural Gas
- [ ] Telephone
- [ ] Steam Lines
- [ ] Telecommunications
- [ ] Electric
- [ ] Other Specify:

- [ ] Check here if you provided DEP with previous oral notification of this URAM.
  - Date of Oral Notice:
- [ ] Check here if the property owner was NOT contacted prior to initiation of the URAM. If this is the case, you must attach an explanation of why the owner was not contacted, including the date and time when contact ultimately occurred.
- [ ] Check here if this URAM will occur in connection with the construction of new public utilities. If this is the case, document the nature and extent of encountered contamination, the scope and expense of necessary mitigation and the benefits and limitations of project alternatives.

With the exception stated below, the person undertaking the URAM must provide the name and license number of an LSP engaged or employed in connection with the URAM:

LSP Name: LSP License Number:

LSP information is not required if the URAM is limited to the excavation and/or handling of not more than 100 cubic yards of soil contaminated by Oil, or not more than 20 cubic yards of soil contaminated either by a Hazardous Material or a mixture of a Hazardous Material and Oil.

Massachusetts Department of Environmental Protection **BWSC-106**
Bureau of Waste Site Cleanup

RELEASE & UTILITY-RELATED ABATEMENT MEASURE (RAM & URAM) TRANSMITTAL FORM

Pursuant to 310 CMR 40.0444 - 0446 and 310 CMR 40.0462 - 0465 (Subpart D)

Release Tracking Number: 3 - 173

I. URAM COMPLETION STATEMENT:

☐ Check here if this URAM was limited to the excavation and/or handling of not more than 100 cubic yards of soil contaminated by Oil, or not more than 20 cubic yards of soil contaminated by either a Hazardous Material or a mixture of a Hazardous Material and Oil.

If any Remediation Waste will be stored, treated, managed, recycled or reused at the site following submission of the URAM Completion Statement, you must submit either a Release Abatement Measure (RAM) Plan or a Phase IV Remedy Implementation Plan, along with the appropriate transmittal form, as an attachment to the URAM Completion Statement.

J. LSP OPINION:

I attest under the pains and penalties of perjury that I have personally examined and am familiar with this transmittal form, including any and all documents accompanying this submittal. In my professional opinion and judgment based upon application of (i) the standard of care in 309 CMR 4.02(1), (ii) the applicable provisions of 309 CMR 4.02(2) and (3), and (iii) the provisions of 309 CMR 4.03(5), to the best of my knowledge, information and belief,

> *if Section B of this form indicates that a **Release Abatement Measure Plan** is being submitted*, the response action(s) that is (are) the subject of this submittal (i) has (have) been developed in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) complies(y) with the identified provisions of all orders, permits, and approvals identified in this submittal;

> *if Section B of this form indicates that a **Release Abatement Measure Status Report** or a **Utility-Related Abatement Measure Status Report** is being submitted*, the response action(s) that is (are) the subject of this submittal (i) is (are) being implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) complies(y) with the identified provisions of all orders, permits, and approvals identified in this submittal;

> *if Section B of this form indicates that a **Release Abatement Measure Completion Statement** or a **Utility-Related Abatement Measure Completion Statement** is being submitted*, the response action(s) that is (are) the subject of this submittal (i) has (have) been developed and implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) complies(y) with the identified provisions of all orders, permits, and approvals identified in this submittal;

I am aware that significant penalties may result, including, but not limited to, possible fines and imprisonment, if I submit information which I know to be false, inaccurate or materially incomplete.

☐ Check here if the Response Action(s) on which this opinion is based, if any, are (were) subject to any order(s), permit(s) and/or approval(s) issued by DEP or EPA. If the box is checked, you MUST attach a statement identifying the applicable provisions thereof.

LSP Name: William R. Swanson LSP #: 6406 Stamp:

Telephone: 617-252-8000 Ext.: 8458

FAX: (optional) 617-621-2565

Signature: William R. Swanson

Date: 3/5/99

An LSP Opinion is not required for a Utility-Related Abatement Measure Notification.

An LSP Opinion is not required for a URAM Completion Statement if the URAM is limited to the excavation and/or handling of not more than 100 cubic yards of soil contaminated by Oil, or not more than 20 cubic yards of soil contaminated either by Hazardous Material or a mixture of Hazardous Material and Oil.

K. PERSON UNDERTAKING RAM OR URAM:

Name of Organization: Buckley and Mann, Inc.

Name of Contact: Richard Mann/Stephen Mann Title: Owners

Street: 15 Bush Pond Lane

City/Town: Norfolk State: MA ZIP Code: 02056-0000

Telephone: 617-828-0029 Ext.: 3442 FAX: (optional)

☐ Check here if there has been a change in person undertaking the RAM or URAM.

Massachusetts Department of Environmental Protection **BWSC-106**
Bureau of Waste Site Cleanup

RELEASE & UTILITY-RELATED ABATEMENT MEASURE (RAM & URAM) TRANSMITTAL FORM

Pursuant to 310 CMR 40.0444 - 0446 and 310 CMR 40.0462 - 0465 (Subpart D)

Release Tracking Number: 3 - 173

L. RELATIONSHIP TO SITE OF PERSON UNDERTAKING RAM or URAM: (check one)

☑ RP or PRP Specify: ◉ Owner ○ Operator ○ Generator ○ Transporter Other RP or PRP: _____

☐ Fiduciary, Secured Lender or Municipality with Exempt Status (as defined by M.G.L. c. 21E, s. 2)

☐ Agency or Public Utility on a Right of Way (as defined by M.G.L. c. 21E, s. 5(j))

☐ Any Other Person Undertaking RAM or URAM Specify Relationship: _____

M. CERTIFICATION OF PERSON UNDERTAKING RAM OR URAM:

I, Richard Mann, attest under the pains and penalties of perjury (i) that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this transmittal form, (ii) that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained in this submittal is, to the best of my knowledge and belief, true, accurate and complete, and (iii) that I am fully authorized to make this attestation on behalf of the entity legally responsible for this submittal. I/the person or entity on whose behalf this submittal is made am/is aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information.

By: Richard Mann (signature) Title: President

For: Buckley and Mann, Inc. (print name of person or entity recorded in Section K) Date: 3/31/99

Enter address of person providing certification, if different from address recorded in Section K:

Street: N/A

City/Town: _____ State: _____ ZIP Code: _____

Telephone: _____ Ext.: _____ FAX: (optional) _____

YOU MUST COMPLETE ALL RELEVANT SECTIONS OF THIS FORM OR DEP MAY RETURN THE DOCUMENT AS INCOMPLETE. IF YOU SUBMIT AN INCOMPLETE FORM, YOU MAY BE PENALIZED FOR MISSING A REQUIRED DEADLINE.

Norfolk
17 Lawrence St.
3-0173

SCANNED

BUCKLEY & MANN, INC.
14 Bush Pond Road
Norfolk, MA 02056

September 16, 1998

Department of Environmental Protection
Northeast Regional Office
205 Lowell Street
Wilmington, MA 01887

Enclosed please find a semi-annual Status Report for the Release Abatement Measure at the Buckley & Mann property in Norfolk, Massachusetts. The site is Bureau of Waste Site Cleanup #3-0173.

If you have any questions, please contact either Stephen or Richard Mann at (781) 828-0029, X3427 or X3442.

Stephen L. Mann

RELEASE ABATEMENT MEASURE (RAM) PLAN STATUS REPORT
for
BUCKLEY & MANN, INC., NORFOLK, MASSACHUSETTS

BUREAU OF WASTE SITE CLEAN-UP SITE NUMBER 3-0173

Prepared by

CAMP DRESSER & McKEE INC.
CAMBRIDGE, MASSACHUSETTS

September 1998

Robert A. Dangel
Licensed Site Professional # 7798

William R. Swanson
Licensed Site Professional # 6406

RELEASE ABATEMENT MEASURE (RAM) PLAN STATUS REPORT
BUCKLEY & MANN, INC., NORFOLK, MASSACHUSETTS
BUREAU OF WASTE SITE CLEAN-UP SITE NUMBER 3-0173

1. Previous filing

The original RAM Plan was filed on May 28, 1996, and the revised RAM plan was filed in December 1997. The previous RAM Status report was filed in May 1998.

2. Work since the last report

Excavation of the contaminated soils was completed in Areas 3, 5, 6 , 7 and 10 in May and June 1998. Approximately 4,550 cubic yards of soil were excavated in areas , visually inspected for unsuitable material, and then consolidated in Area 10. Timbers, abandoned textile processing equipment, large concrete blocks and similar materials were stockpiled near the former manufacturing buildings for future disposal coordinated with the demolition of the buildings. The soil was visually inspected for material unsuitable for on-site consolidation, in accordance with the revised RAM Plan. None was found, other than as described below. The soil was regraded in Area 10 and then covered with a geotextile fabric and 3 feet of clean sand, as described in the Plan.

Approximately 315 tons of soil from near Test Pit 10, which had previously been judged to be unsuitable for on-site consolidation, was shipped to Chemical Waste Management Inc.'s Turnkey facility in Rochester, NH under a MCP Bill of Lading. Four cubic yards of asbestos containing transite panels were also removed from the site for disposal at United Waste System's Kelly Run Landfill in Elizabeth, PA.

A more detailed description of the RAM work will be included in the pending RAM Completion Report.

3. Work planned

Over the next six months, the following work is planned:

- Sample soils east of the Area 10 consolidation cover. Analyze the soils for PAH compounds and selected metals to confirm the removal of materials from this area.
- Sample groundwater samples near the former dyehouse wastewater treatment Lagoons #1 and #2. Analyze the samples for PAH compounds and selected metals to evaluate actual soil-to-groundwater leaching conditions. This task will require low groundwater conditions.
- Loam and seed the consolidation cover in Area 10.
- Survey the Area 10 consolidation area to be included in the proposed the Activity and Use Limitation (AUL), prepare the AUL and record the AUL.
- Prepare a RAM Completion Statement and file the Statement (or a Response Action Outcome) and the AUL with the DEP.

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC-106

RELEASE & UTILITY-RELATED ABATEMENT MEASURE (RAM & URAM) TRANSMITTAL FORM

Pursuant to 310 CMR 40.0444 - 0446 and 310 CMR 40.0462 - 0465 (Subpart D)

Release Tracking: 3 - 173

A. SITE LOCATION:

Site Name: Buckley and Mann Inc.

Street: 17 Lawrence Street Location Aid: Bush Pond

City/Town: Norfolk, Massachusetts ZIP: 02056-0000

☐ Check here if a Tier Classification Submittal has been provided to DEP for this Release Tracking Number.

Related Release Tracking Numbers That This RAM or URAM

B. THIS FORM IS BEING USED TO: (check all that apply)

☐ Submit a **RAM Plan** (complete Sections A, B, C, D, E, F, J, K, L and M).

☐ Check here if this RAM Plan is an update or modification of a previously approved written RAM Plan.

Date Submitted:

☑ Submit a **RAM Status Report** (complete Sections A, B, C, E, J, K, L and M).

☐ Submit a **RAM Completion Statement** (complete Sections A, B, C, D, E, G, J, K, L and M).

☐ Confirm or Provide **URAM Notification** (complete Sections A, B, H, K, L and M).

☐ Submit a **URAM Status Report** (complete Sections A, B, C, E, J, K, L and M).

☐ Submit a **URAM Completion Statement** (complete Sections A, B, C, D, E, I, J, K, L and M).

RECEIVED
SEP 21 1998
DEP/NORTHEAST REGION
WOBURN, MASS.

You must attach all supporting documentation required for each use of form indicated, including copies of any Legal Notices and Notices to Public Officials required by 310 CMR 40.1400.

C. SITE CONDITIONS:

☑ Check here if the source of the Release or Threat of Release is known.

If yes, check all sources that apply: ☐ UST ☐ Pipe/Hose/Line ☐ AST ☐ Drums ☐ Transformer ☐ Boat

☐ Tanker Truck ☐ Vehicle ☑ Other Specify: Bldg.debris, coal ash and textile plant wastes

Identify Media and Receptors Affected: (check all that apply) ☐ Air ☐ Groundwater ☐ Surface Water ☐ Sediments ☑ Soil

☐ Wetlands ☐ Storm Drain ☐ Paved Surface ☐ Private Well ☐ Public Water Supply ☐ Zone 2 ☐ Residence

☐ School ☐ Unknown ☐ Other Specify:

Identify Release and/or Threat of Release Conditions at Site: (check all that apply)

☐ 2 and 72 Hour Reporting Condition(s) ☑ 120 Day Reporting Condition(s) ☐ Other Condition(s)

Describe Metals, PAH and TPH from building debris, coal ash and textile plant wastes

RAMs may be conducted concurrently with an IRA only with written DEP approval
URAMs may not be conducted if any 2 or 72 Hour conditions exist at the site.

Identify Oils and Hazardous Materials Released: (check all that apply) ☐ Oils ☐ Chlorinated Solvents ☑ Heavy Metals

☑ Others Specify: PAH and TPH

D. DESCRIPTION OF RESPONSE ACTIONS: (check all that apply)

☐ Assessment and/or Monitoring Only

☑ Excavation of Contaminated Soils

☐ Re-use, Recycling or Treatment

○ On Site ○ Off Site Est. Vol.:_____ cubic yards

Describe:

☐ Store ○ On Site ○ Off Site Est. Vol.: _____ cubic yards

☐ Deployment of Absorbant or Containment Materials

☐ Temporary Covers or Caps

☐ Bioremediation

☐ Soil Vapor Extraction

☐ Structure Venting System

☐ Product or NAPL Recovery

SECTION D IS CONTINUED ON THE NEXT PAGE.

RELEASE & UTILITY-RELATED ABATEMENT MEASURE (RAM & URAM) TRANSMITTAL FORM

Pursuant to 310 CMR 40.0444 - 0446 and 310 CMR 40.0462 - 0465 (Subpart D)

Release Tracking: 3 - 173

D. DESCRIPTION OF RESPONSE ACTIONS (continued):

- [x] Landfill ( ) Cover (x) Disposal Est. Vol.: 315 tons cubic yards
- [ ] Removal of Drums, Tanks or Containers
  - Describe: _____
- [ ] Removal of Other Contaminated Media
  - Specify Type and _____
- [x] Other Response Actions Describe On site consolidation and covering of 4,550 cy soil
- [ ] Groundwater Treatment Systems
- [ ] Air Sparging
- [ ] Temporary Water Supplies
- [ ] Temporary Evacuation or Relocation of Residents
- [ ] Fencing and Sign Posting

See 310 CMR 40.0442 for limitations on the scope and type of RAMs.
See 310 CMR 40.0464 for performance standards for URAMs.

- [ ] Check here if this RAM or URAM involves the use of Innovative Technologies. DEP is interested in using this information to aid in creating an Innovative Technologies Clearinghouse.
  - Describe _____

E. TRANSPORT OF REMEDIATION WASTE:

(if Remediation Waste has been sent to an off-site facility, answer the following

Name of Chemical Waste Management -Turnkey Facility

Town and State: Rochester, NH

Quantity of Remediation Waste Transported to 315 tons

F. RAM PLAN:

- [ ] Check here if this RAM Plan received previous oral approval from DEP as a continuation of a Limited Removal Action (LRA).
  - Date of Oral _____
- [ ] If a RAM Compliance Fee is required, check here to certify that the fee has been submitted. You **MUST** attach a photocopy of the payment. See 310 CMR 40.0444(2) to learn when a fee is not required.
- [ ] Check here if the RAM Plan is proposed for a Transition Site. If this is the case, you may need to attach an LSP Evaluation Opinion prior to undertaking the RAM, if not previously provided. See 310 CMR 40.0600 for further information about Transition Sites.

G. RAM COMPLETION STATEMENT:

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If any Remediation Waste will be stored, treated, managed, recycled or reused at the site following submission of the RAM Completion Statement, you must submit a Phase IV Remedy Implementation Plan, along with the appropriate transmittal form, as an attachment to the RAM Completion Statement.

H. URAM NOTIFICATION:

Identify Location Type: (check all that apply) [ ] Public Right of Way [ ] Utility Easement [ ] Private Property

Identify Utility Type: (check all that [ ] Sanitary/Combined Sewerage [ ] Water [ ] Drainage [ ] Natural Gas [ ] Telephone [ ] Steam Lines [ ] Telecommunications [ ] Electric [ ] Other Specify: _____

- [ ] Check here if you provided DEP with previous oral notification of this URAM. Date of Oral _____
- [ ] Check here if the property owner was NOT contacted prior to initiation of the URAM. If this is the case, you must attach an explanation of why the owner was not contacted, including the date and time when contact ultimately occurred.
- [ ] Check here if this URAM will occur in connection with the construction of new public utilities. If this is the case, document the nature and extent of encountered contamination, the scope and expense of necessary mitigation and the benefits and limitations of project alternatives.

With the exception stated below, the person undertaking the URAM must provide the name and license number of an LSP engaged or employed in connection with the URAM:

LSP Name: _____ LSP License Number: _____

LSP information is not required if the URAM is limited to the excavation and/or handling of not more than 100 cubic yards of soil contaminated by Oil, or not more than 20 cubic yards of soil contaminated either by a Hazardous Material or a mixture of a Hazardous

RELEASE & UTILITY-RELATED ABATEMENT MEASURE (RAM & URAM) TRANSMITTAL FORM

Pursuant to 310 CMR 40.0444 - 0446 and 310 CMR 40.0462 - 0465 (Subpart D)

Release Tracking: 3 - 173

I. URAM COMPLETION STATEMENT:

☐ Check here if this URAM was limited to the excavation and/or handling of not more than 100 cubic yards of soil contaminated by Oil, or not more than 20 cubic yards of soil contaminated by either a Hazardous Material or a mixture of a Hazardous Material and Oil.

If any Remediation Waste will be stored, treated, managed, recycled or reused at the site following submission of the URAM Completion Statement, you must submit either a Release Abatement Measure (RAM) Plan or a Phase IV Remedy Implementation Plan, along with the appropriate transmittal form, as an attachment to the URAM Completion Statement.

J. LSP OPINION:

I attest under the pains and penalties of perjury that I have personally examined and am familiar with this transmittal form, including any and all documents accompanying this submittal. In my professional opinion and judgment based upon application of (i) the standard of care in 309 CMR 4.02(1), (ii) the applicable provisions of 309 CMR 4.02(2) and (3), and (iii) the provisions of 309 CMR 4.03(5), to the best of my knowledge, information and belief,

> *If Section B of this form indicates that a **Release Abatement Measure Plan** is being submitted*, the response action(s) that is (are) the subject of this submittal (i) has (have) been developed in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) complies(y) with the identified provisions of all orders, permits, and approvals identified in this submittal;

> *If Section B of this form indicates that a **Release Abatement Measure Status Report** or a **Utility-Related Abatement Measure Status Report** is being submitted*, the response action(s) that is (are) the subject of this submittal (i) is (are) being implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) complies(y) with the identified provisions of all orders, permits, and approvals identified in this submittal;

> *If Section B of this form indicates that a **Release Abatement Measure Completion Statement** or a **Utility-Related Abatement Measure Completion Statement** is being submitted*, the response action(s) that is (are) the subject of this submittal (i) has (have) been developed and implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) complies(y) with the identified provisions of all orders, permits, and approvals identified in this submittal;

I am aware that significant penalties may result, including, but not limited to, possible fines and imprisonment, if I submit information which I know to be false, inaccurate or materially incomplete.

☐ Check here if the Response Action(s) on which this opinion is based, if any, are (were) subject to any order(s), permit(s) and/or approval(s) issued by DEP or EPA. If the box is checked, you MUST attach a statement identifying the applicable provisions thereof.

LSP Name: William R. Swanson LSP #: 6406 Stamp:

Telephone: 617-252-8000 Ext.: 8458

FAX: (optional) 617-621-2565

Signature: William R. Swanson

Date: 9/11/98

COMMONWEALTH OF MASSACHUSETTS
WILLIAM R. SWANSON
No. 6406
REGISTERED
LICENSED SITE PROFESSIONAL

An LSP Opinion is not required for a Utility-Related Abatement Measure Notification.

An LSP Opinion is not required for a URAM Completion Statement if the URAM is limited to the excavation and/or handling of not more than 100 cubic yards of soil contaminated by Oil, or not more than 20 cubic yards of soil contaminated either by Hazardous Material or a mixture of Hazardous Material and Oil.

K. PERSON UNDERTAKING RAM OR URAM:

Name of: Buckley and Mann, Inc.

Name of: Richard Mann/Stephen Mann Title: Owners

Street: 15 Bush Pond Lane

City/Town: Norfolk State: MA ZIP Code: 02056-0000

Telephone: 617-828-0029 Ext.: 3442 FAX:

☐ Check here if there has been a change in person undertaking the RAM or URAM.

Massachusetts Department of Environmental Protection **BWSC-106**
Bureau of Waste Site Cleanup

RELEASE & UTILITY-RELATED ABATEMENT MEASURE (RAM & URAM) TRANSMITTAL FORM

Pursuant to 310 CMR 40.0444 - 0446 and 310 CMR 40.0462 - 0465 (Subpart D)

Release Tracking 3 - 173

L. RELATIONSHIP TO SITE OF PERSON UNDERTAKING RAM or URAM: (check one)

☑ RP or PRP Specify: ◉ Owner ○ Operator ○ Generator ○ Transporter Other RP or PRP: _____

☐ Fiduciary, Secured Lender or Municipality with Exempt Status (as defined by M.G.L. c. 21E, s. 2)

☐ Agency or Public Utility on a Right of Way (as defined by M.G.L. c. 21E, s. 5(j))

☐ Any Other Person Undertaking RAM or URAM Specify _____

M. CERTIFICATION OF PERSON UNDERTAKING RAM OR URAM:

I, STEPHEN L. MANN Richard Mann, attest under the pains and penalties of perjury (i) that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this transmittal form, (ii) that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained in this submittal is, to the best of my knowledge and belief, true, accurate and complete, and (iii) that I am fully authorized to make this attestation on behalf of the entity legally responsible for this submittal. I/the person or entity on whose behalf this submittal is made am/is aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information.

By: _____ Title: TREASURER
(signature)

For: Buckley and Mann, Inc. Date: 9/16/98
(print name of person or entity recorded in Section K)

Enter address of person providing certification, if different from address recorded in Section

Street: N/A

City/Town: _____ State: _____ ZIP Code: _____

Telephone: _____ Ext.: _____ FAX: (optional) _____

YOU MUST COMPLETE ALL RELEVANT SECTIONS OF THIS FORM OR DEP MAY RETURN THE DOCUMENT AS INCOMPLETE. IF YOU SUBMIT AN INCOMPLETE FORM, YOU MAY BE PENALIZED FOR MISSING A REQUIRED DEADLINE.

NORFOLK
517 Lawrence St.
3-0173

.CDM Camp Dresser & McKee Inc.

consulting engineering construction operations

Ten Cambridge Center
Cambridge, Massachusetts 02142
Tel: 617 252-8000 Fax: 617 621-2565

July 24, 1998

Massachusetts Department of Environmental Protection
Northeast Regional Office
205A Lowell Street
Wilmington, Massachusetts 01887

Subject: Buckley & Mann Inc.
RTN # 3-0173

Attention: Bureau of Waste Site Cleanup

Enclosed is the original copy of the Bill of Lading used to transport and dispose of remediation waste from the Buckley & Mann Inc. site in Norfolk, Massachusetts. Approximately 315 tons of soil and debris was removed from the site on June 23, 1998 and disposed of at the Waste Management Turnkey Facility in Rochester, New Hampshire as part of the Release Abatement Measure being conducted at the site.

If you have any question, please contact me at (617) 252-8458.

Very truly yours,

CAMP DRESSER & McKEE INC.

W. R. Swanson

William R. Swanson, P.E., LSP
Vice President

1121-22308-GS.FIELD
A:\BOL.WPD

Massachusetts Department of Environmental Protection BWSC-012A

Bureau of Waste Site Cleanup

Release Tracking Number*: 3 - 0173

BILL OF LADING (pursuant to 310 CMR 40.0030)

A. LOCATION OF SITE OR DISPOSAL SITE WHERE REMEDIATION WASTE WAS GENERATED:

Release Name (optional): Buckley & Mann, Inc.

Street: 17 Lawrence Street Location Aid: Near Bush Pond

City/Town: Norfolk, MA Zip Code: 02056 -

Date/Period of Generation: 6 /15 /98 to ___ /___ /___

Additional Release Tracking Numbers Associated with this Bill of Lading: N/A

Note: If this Bill of Lading is the result of a Limited Removal Action (LRA) taken prior to Notification, a Release Tracking Number is not needed.

B. PERSON CONDUCTING RESPONSE ACTION ASSOCIATED WITH BILL OF LADING:

Name of Organization: Buckley & Mann, Inc.

Name of Contact: Stephen L. Mann Title: Owner

Street: 14 Bush Pond Road

City/Town: Norfolk State: MA Zip Code: 02056 -

Telephone: 617 - 828 - 0029 Ext. 3427

C. RELATIONSHIP TO RELEASE OR THREAT OF RELEASE OF PERSON CONDUCTING RESPONSE ACTION ASSOCIATED WITH BILL OF LADING:

(check one/specify)

- [X] RP Specify (circle one): (Owner) Operator Generator Transporter Other RP:
- [ ] PRP Specify (circle one): Owner Operator Generator Transporter Other PRP:
- [ ] Fiduciary/Secured Lender
- [ ] Agency/Public Utility on a Right of Way
- [ ] Other Person:

RECEIVED JUL 27 1998 DEP/NORTHEAST REGION WOBURN, MASS

If an owner and/or operator is not conducting the response action associated with the Bill of Lading, provide on an attachment the name, contact person, address and telephone number, including any area code and extension, for each, if known.

D. TRANSPORTER/COMMON CARRIER INFORMATION:

Transporter/Common Carrier Name: Sam's Transportation

Contact Person: William Ricker Title: Manager

Street: 104 West Main Street

City/Town: Georgetown State: MA Zip Code: 01833 -

Telephone: 978 - 352 - 6689 Ext.

E. RECEIVING FACILITY/TEMPORARY STORAGE LOCATION:

Operator/Facility Name: Chem-Waste Management, Turnkey

Contact Person: Title:

Street: 97 Rochester Neck Road

City/Town: Rochester State: NH Zip Code: 03839 -

Telephone: 800 - 379 - 2783 Ext.

Type of Facility: (check one)

- [ ] Asphalt Batch/Cold Mix
- [ ] Asphalt Batch/Hot Mix
- [ ] Thermal Processing
- [X] Landfill/Disposal
- [ ] Landfill/Daily Cover
- [ ] Landfill/Structural Fill
- [ ] Incinerator
- [ ] Temporary Storage
- [ ] Other:

Division of Hazardous Waste/Class A Permit #:

Division of Solid Waste Management Permit #: DES-SW-SP-95-001 EPA Identification #: NHD980914634

Actual/Anticipated Period of Temporary Storage (specify dates if applicable): ___ /___ /___ to ___ /___ /___

Reason for Temporary Storage (if applicable):

Massachusetts Department of Environmental Protection **BWSC-012A**
Bureau of Waste Site Cleanup

Release Tracking Number: 3 - 0173

BILL OF LADING (pursuant to 310 CMR 40.0030)

E. RECEIVING FACILITY/TEMPORARY STORAGE LOCATION (continued):

Temporary Storage Address:

Street: _____

City/Town: _____ State: _____ Zip Code: _____ - _____

F. DESCRIPTION OF REMEDIATION WASTE:

(check all that apply)

[X] Contaminated Media (circle all that apply): (Soil) Groundwater Surface Water Other: _____

[ ] Contaminated Debris (circle all that apply): Demolition/Construction Waste Vegetation/Organic Materials
Inorganic Absorbant Materials Other: _____

[ ] Non-hazardous Uncontainerized Waste (circle all that apply): Non-aqueous Phase Liquid Other: _____

[ ] Non-hazardous Containerized Waste (circle all that apply): Tank Bottoms/Sludges Containers Drums
Engineered Impoundments Other: _____

Type of Contamination (circle all that apply): Gasoline Diesel Fuel #2 Oil #4 Oil #6 Oil Waste Oil
Kerosene Jet Fuel Other: Cloth debris from textile plant, metal shavings

Estimated Volume of Materials: Cubic Yards: _____ Tons: 250 Other: _____

Contaminant Source (check one/specify): [ ] Transportation Accident [ ] Underground Storage Tank [X] Other: Former Plant Landfill

Response Action Associated with Bill of Lading (circle one): Immediate Response Action (Release Abatement Measure)
Utility-Related Abatement Measure Limited Removal Action (LRA) Comprehensive Response Action
Other (specify): _____

Remediation Waste Characterization Support Documentation attached:

[ ] Site History Information [ ] Sampling and Analytical Methods and Procedures [X] Laboratory Data [ ] Field Screening Data

If supporting documentation is not appended, provide an attachment stating the date and in connection with what document such information was previously submitted to DEP.

G. LICENSED SITE PROFESSIONAL (LSP) OPINION:

SEE REPLACEMENT OPINION V

Name of Organization: _____

LSP Name: _____ Title: _____

Telephone ___ - ___ - ____ Ext. _____

I have personally examined and am familiar with the information contained on and submitted with this form. Based on this information, it is my Opinion that the testing and assessment actions undertaken were adequate to characterize the Remediation Waste, in accordance with 310 CMR 40.0030, and that the facility or location can accept remediation wastes with the characteristics described in this submittal. I am aware that significant penalties including, but not limited to, possible fines and imprisonment may result if I wilfully submit information which I know to be false, inaccurate, or materially incomplete.

Signature: _____ Seal:

Date: __/__/__

License Number: _____

H. CERTIFICATION OF PERSON CONDUCTING RESPONSE ACTION ASSOCIATED WITH THIS BILL OF LADING:

I certify under penalties of law that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this certification, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained herein is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for wilfully submitting false, inaccurate, or incomplete information.

Signature: _____ Date: 6/19/98

Name of Person (print): STEPHEN L. MANN

Use LSP Replacement Opinion V with the following BWSC Form:

o Bill of Lading (BWSC-012A)

LSP Replacement Opinion V

I attest under the pains and penalties of perjury that I have personally examined and am familiar with this submittal, including any and all documents accompanying this submittal. In my professional opinion and judgment based upon application of

(i) the standard of care in 309 CMR 4.02(1),
(ii) the applicable provisions of 309 CMR 4.02(2) and (3), and
(iii) the provisions of 309 CMR 4.03(5),

to the best of my knowledge, information and belief, the assessment actions undertaken to characterize the Remediation Waste which is (are) the subject of this submittal for acceptance at the facility identified in this submittal comply with the applicable provisions of 310 CMR 40.0000, and such facility is permitted to accept Remediation Waste having the characteristics described in this submittal. I am aware that significant penalties may result, including, but not limited to, possible fines and imprisonment, if I submit information which I know to be false, inaccurate or materially incomplete.

Release Tracking Number: 3 - 0173

LSP Name: William R. Swanson Title: Vice President

LSP Organization: Camp Dresser & McKee Inc. Date: 6 / 18 / 98

Telephone/Ext.: 617 - 252 - 8458 Seal:

Signature: William R. Swanson

COMMONWEALTH OF MASSACHUSETTS
WILLIAM R. SWANSON
No. 6406
REGISTERED
LICENSED SITE PROFESSIONAL

Massachusetts Department of Environmental Protection **BWSC**-012B
Bureau of Waste Site Cleanup

Release Tracking Number: 3-0173

BILL OF LADING (pursuant to 310 CMR 40.0030)
LOG SHEET 1 **OF** 2 (SIGN-OUT SHEET)

I. LOAD INFORMATION:

LOAD 1: Signature of Transporter Representative: Richard Bell
Date of Shipment: 6/23/98 Time of Shipment: 7 : 30 (circle one) am/pm
Truck/Tractor Registration: 4930 AP, NH Trailer Registration (if any): 65817 MA
Receiving Facility/Temporary Storage Representative:
Date of Receipt: __/__/__ Time of Receipt: __:__ (circle one) am/pm
Load Size (cu. yds./tons):

LOAD 2: Signature of Transporter Representative: JOHN HEWSON
Date of Shipment: 6/23/98 Time of Shipment: 7 : 40 (circle one) am/pm
Truck/Tractor Registration: AP3160 NH Trailer Registration (if any): 65872 MA
Receiving Facility/Temporary Storage Representative:
Date of Receipt: __/__/__ Time of Receipt: __:__ (circle one) am/pm
Load Size (cu. yds./tons):

LOAD 3: Signature of Transporter Representative: John Sullivan
Date of Shipment: 6/23/98 Time of Shipment: 7:55 (circle one) am/pm
Truck/Tractor Registration: 19184 MA Trailer Registration (if any): 65824 MA
Receiving Facility/Temporary Storage Representative:
Date of Receipt: __/__/__ Time of Receipt: __:__ (circle one) am/pm
Load Size (cu. yds./tons):

LOAD 4: Signature of Transporter Representative: Thomas R. Ley
Date of Shipment: 6/23/98 Time of Shipment: 8 : 15 (circle one) am/pm
Truck/Tractor Registration: 19185 MA Trailer Registration (if any): 29708 MA
Receiving Facility/Temporary Storage Representative:
Date of Receipt: __/__/__ Time of Receipt: __:__ (circle one) am/pm
Load Size (cu. yds./tons):

LOAD 5: Signature of Transporter Representative: Ron Ricker
Date of Shipment: 6/23/98 Time of Shipment: 9 : 30 (circle one) am/pm
Truck/Tractor Registration: 33070 MA Trailer Registration (if any): 65812 MA
Receiving Facility/Temporary Storage Representative:
Date of Receipt: __/__/__ Time of Receipt: __:__ (circle one) am/pm
Load Size (cu. yds./tons):

LOAD 6: Signature of Transporter Representative: Richard Bell
Date of Shipment: 6/23/98 Time of Shipment: 1 : 00 (circle one) am/pm
Truck/Tractor Registration: 4930 AP NH Trailer Registration (if any): 65817 MA
Receiving Facility/Temporary Storage Representative:
Date of Receipt: __/__/__ Time of Receipt: __:__ (circle one) am/pm
Load Size (cu. yds./tons):

LOAD 7: Signature of Transporter Representative: JOHN HEWSON
Date of Shipment: 6/23/98 Time of Shipment: 1 : 05 (circle one) am/pm
Truck/Tractor Registration: AP3160 NH Trailer Registration (if any): 65872 MA
Receiving Facility/Temporary Storage Representative:
Date of Receipt: __/__/__ Time of Receipt: __:__ (circle one) am/pm
Load Size (cu. yds./tons):

LOG SHEET VOLUME INFORMATION:

Total Volume This Page (cu.yds./tons):
Total Carried Forward (cu.yds./tons):
Total Carried Forward and This Page(cu.yds./tons):

Massachusetts Department of Environmental Protection **BWSC-012B**

Bureau of Waste Site Cleanup

Release Tracking Number: 3-0173

BILL OF LADING (pursuant to 310 CMR 40.0030)
LOG SHEET 2 **OF** 2 (SIGN-OUT SHEET)

I. LOAD INFORMATION:

LOAD 1: Signature of Transporter Representative: [signature]
Date of Shipment: 6/23/98 Time of Shipment: 2 : 00 (circle one) am/pm
Truck/Tractor Registration: 19185 MA Trailer Registration (if any): 29708 MA
Receiving Facility/Temporary Storage Representative:
Date of Receipt: __/__/__ Time of Receipt: __:__ (circle one) am/pm
Load Size (cu. yds./tons):

LOAD 2: Signature of Transporter Representative: John Sullivan
Date of Shipment: 6/23/98 Time of Shipment: 2 : 15 (circle one) am/pm
Truck/Tractor Registration: 19184 MA Trailer Registration (if any): 65824 MA
Receiving Facility/Temporary Storage Representative:
Date of Receipt: __/__/__ Time of Receipt: __:__ (circle one) am/pm
Load Size (cu. yds./tons):

LOAD 3: Signature of Transporter Representative:
Date of Shipment: __/__/__ Time of Shipment: __:__ (circle one) am/pm
Truck/Tractor Registration: Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt: __/__/__ Time of Receipt: __:__ (circle one) am/pm
Load Size (cu. yds./tons):

LOAD 4: Signature of Transporter Representative:
Date of Shipment: __/__/__ Time of Shipment: __:__ (circle one) am/pm
Truck/Tractor Registration: Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt: __/__/__ Time of Receipt: __:__ (circle one) am/pm
Load Size (cu. yds./tons):

LOAD 5: Signature of Transporter Representative:
Date of Shipment: __/__/__ Time of Shipment: __:__ (circle one) am/pm
Truck/Tractor Registration: Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt: __/__/__ Time of Receipt: __:__ (circle one) am/pm
Load Size (cu. yds./tons):

LOAD 6: Signature of Transporter Representative:
Date of Shipment: __/__/__ Time of Shipment: __:__ (circle one) am/pm
Truck/Tractor Registration: Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt: __/__/__ Time of Receipt: __:__ (circle one) am/pm
Load Size (cu. yds./tons):

LOAD 7: Signature of Transporter Representative:
Date of Shipment: __/__/__ Time of Shipment: __:__ (circle one) am/pm
Truck/Tractor Registration: Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt: __/__/__ Time of Receipt: __:__ (circle one) am/pm
Load Size (cu. yds./tons):

LOG SHEET VOLUME INFORMATION:

Total Volume This Page (cu.yds./tons):
Total Carried Forward (cu.yds./tons):
Total Carried Forward and This Page(cu.yds./tons):

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Massachusetts Department of Environmental Protection **BWSC-012B**
Bureau of Waste Site Cleanup

BILL OF LADING (pursuant to 310 CMR 40.0030)
LOG SHEET 1 **OF** 9

Release Tracking Number: 3 - 0173

I. LOAD INFORMATION:

LOAD 1: Signature of Transporter Representative: [signature]
Date of Shipment: 6/23/98 Time of Shipment: 8 : 00 (circle one) am/pm
Truck/Tractor Registration: 1730 AP NH Trailer Registration (if any): 65817 MA

Receiving Facility/Temporary Storage Representative: [signature]
Date of Receipt: 6/23/98 Time of Receipt: ___ : ___ (circle one) am/pm
Load Size (cu. yds./tons): 31.49

LOAD 2: Signature of Transporter Representative:
Date of Shipment: ___/___/___ Time of Shipment: ___ : ___ (circle one) am/pm
Truck/Tractor Registration: Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:
Date of Receipt: ___/___/___ Time of Receipt: ___ : ___ (circle one) am/pm
Load Size (cu. yds./tons):

LOAD 3: Signature of Transporter Representative:
Date of Shipment: ___/___/___ Time of Shipment: ___ : ___ (circle one) am/pm
Truck/Tractor Registration: Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:
Date of Receipt: ___/___/___ Time of Receipt: ___ : ___ (circle one) am/pm
Load Size (cu. yds./tons):

LOAD 4: Signature of Transporter Representative:
Date of Shipment: ___/___/___ Time of Shipment: ___ : ___ (circle one) am/pm
Truck/Tractor Registration: Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:
Date of Receipt: ___/___/___ Time of Receipt: ___ : ___ (circle one) am/pm
Load Size (cu. yds./tons):

LOAD 5: Signature of Transporter Representative:
Date of Shipment: ___/___/___ Time of Shipment: ___ : ___ (circle one) am/pm
Truck/Tractor Registration: Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:
Date of Receipt: ___/___/___ Time of Receipt: ___ : ___ (circle one) am/pm
Load Size (cu. yds./tons):

LOAD 6: Signature of Transporter Representative:
Date of Shipment: ___/___/___ Time of Shipment: ___ : ___ (circle one) am/pm
Truck/Tractor Registration: Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:
Date of Receipt: ___/___/___ Time of Receipt: ___ : ___ (circle one) am/pm
Load Size (cu. yds./tons):

LOAD 7: Signature of Transporter Representative:
Date of Shipment: ___/___/___ Time of Shipment: ___ : ___ (circle one) am/pm
Truck/Tractor Registration: Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:
Date of Receipt: ___/___/___ Time of Receipt: ___ : ___ (circle one) am/pm
Load Size (cu. yds./tons):

LOG SHEET VOLUME INFORMATION:

Total Volume This Page (cu.yds./tons): 31.49
Total Carried Forward (cu.yds./tons): -
Total Carried Forward and This Page(cu.yds./tons): 31.49

ATLA

Massachusetts Department of Environmental Protection **BWSC-012B**
Bureau of Waste Site Cleanup

BILL OF LADING (pursuant to 310 CMR 40.0030)
LOG SHEET 2 **OF** 9

Release Tracking Number: 3 - 0173

I. LOAD INFORMATION:

LOAD 1: Signature of Transporter Representative:

Date of Shipment: 6/23/98 Time of Shipment: 7 : 40 (circle one) am/pm

Truck/Tractor Registration: AP 3160 NH

Trailer Registration (if any): 65672 MA

Receiving Facility/Temporary Storage Representative: A. GOMES

Date of Receipt: 6/23/98 Time of Receipt: 9:44 : 10 (circle one) am/pm

Load Size (cu. yds./tons): 39.10

LOAD 2: Signature of Transporter Representative:

Date of Shipment: ___/___/___ Time of Shipment: ___ : ___ (circle one) am/pm

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt: ___/___/___ Time of Receipt: ___ : ___ (circle one) am/pm

Load Size (cu. yds./tons):

LOAD 3: Signature of Transporter Representative:

Date of Shipment: ___/___/___ Time of Shipment: ___ : ___ (circle one) am/pm

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt: ___/___/___ Time of Receipt: ___ : ___ (circle one) am/pm

Load Size (cu. yds./tons):

LOAD 4: Signature of Transporter Representative:

Date of Shipment: ___/___/___ Time of Shipment: ___ : ___ (circle one) am/pm

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt: ___/___/___ Time of Receipt: ___ : ___ (circle one) am/pm

Load Size (cu. yds./tons):

LOAD 5: Signature of Transporter Representative:

Date of Shipment: ___/___/___ Time of Shipment: ___ : ___ (circle one) am/pm

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt: ___/___/___ Time of Receipt: ___ : ___ (circle one) am/pm

Load Size (cu. yds./tons):

LOAD 6: Signature of Transporter Representative:

Date of Shipment: ___/___/___ Time of Shipment: ___ : ___ (circle one) am/pm

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt: ___/___/___ Time of Receipt: ___ : ___ (circle one) am/pm

Load Size (cu. yds./tons):

LOAD 7: Signature of Transporter Representative:

Date of Shipment: ___/___/___ Time of Shipment: ___ : ___ (circle one) am/pm

Truck/Tractor Registration:

Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt: ___/___/___ Time of Receipt: ___ : ___ (circle one) am/pm

Load Size (cu. yds./tons):

LOG SHEET VOLUME INFORMATION:

Total Volume This Page (cu.yds./tons): 39.10

Total Carried Forward (cu.yds./tons): 31.49

Total Carried Forward and This Page(cu.yds./tons): 70.59

#19

Massachusetts Department of Environmental Protection **BWSC-012B**
Bureau of Waste Site Cleanup

BILL OF LADING (pursuant to 310 CMR 40.0030)
LOG SHEET 3 **OF** 9

Release Tracking Number: 3-0173

I. LOAD INFORMATION:

LOAD 1: Signature of Transporter Representative: [signature]
Date of Shipment: 6/27/98 Time of Shipment: 7:50 (circle one) am/pm
Truck/Tractor Registration: 19184 MA Trailer Registration (if any): 65804 MA

Receiving Facility/Temporary Storage Representative: [signature]
Date of Receipt: 6/28/98 Time of Receipt: 08:35 (circle one) am/pm
Load Size (cu. yds./tons): 42.09

LOAD 2: Signature of Transporter Representative:
Date of Shipment: ___/___/___ Time of Shipment: ___:___ (circle one) am/pm
Truck/Tractor Registration: Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:
Date of Receipt: ___/___/___ Time of Receipt: ___:___ (circle one) am/pm
Load Size (cu. yds./tons):

LOAD 3: Signature of Transporter Representative:
Date of Shipment: ___/___/___ Time of Shipment: ___:___ (circle one) am/pm
Truck/Tractor Registration: Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:
Date of Receipt: ___/___/___ Time of Receipt: ___:___ (circle one) am/pm
Load Size (cu. yds./tons):

LOAD 4: Signature of Transporter Representative:
Date of Shipment: ___/___/___ Time of Shipment: ___:___ (circle one) am/pm
Truck/Tractor Registration: Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:
Date of Receipt: ___/___/___ Time of Receipt: ___:___ (circle one) am/pm
Load Size (cu. yds./tons):

LOAD 5: Signature of Transporter Representative:
Date of Shipment: ___/___/___ Time of Shipment: ___:___ (circle one) am/pm
Truck/Tractor Registration: Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:
Date of Receipt: ___/___/___ Time of Receipt: ___:___ (circle one) am/pm
Load Size (cu. yds./tons):

LOAD 6: Signature of Transporter Representative:
Date of Shipment: ___/___/___ Time of Shipment: ___:___ (circle one) am/pm
Truck/Tractor Registration: Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:
Date of Receipt: ___/___/___ Time of Receipt: ___:___ (circle one) am/pm
Load Size (cu. yds./tons):

LOAD 7: Signature of Transporter Representative:
Date of Shipment: ___/___/___ Time of Shipment: ___:___ (circle one) am/pm
Truck/Tractor Registration: Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:
Date of Receipt: ___/___/___ Time of Receipt: ___:___ (circle one) am/pm
Load Size (cu. yds./tons):

LOG SHEET VOLUME INFORMATION:

Total Volume This Page (cu.yds./tons): 42.09
Total Carried Forward (cu.yds./tons): 70.59
Total Carried Forward and This Page(cu.yds./tons): 112.68

Massachusetts Department of Environmental Protection **BWSC-012B**
Bureau of Waste Site Cleanup

BILL OF LADING (pursuant to 310 CMR 40.0030) #16
LOG SHEET 4 **OF** 9

Release Tracking Number: 3-0173

I. LOAD INFORMATION:

LOAD 1: Signature of Transporter Representative:
Date of Shipment: 6/23/98 Time of Shipment: 8 : 18 (circle one) am/pm
Truck/Tractor Registration: 19185 MD Trailer Registration (if any): 25208 MD
Receiving Facility/Temporary Storage Representative:
Date of Receipt: 6/23/98 Time of Receipt: ___ : ___ (circle one) am/pm
Load Size (cu. yds./tons): 35.38

LOAD 2: Signature of Transporter Representative:
Date of Shipment: ___/___/___ Time of Shipment: ___ : ___ (circle one) am/pm
Truck/Tractor Registration: Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt: ___/___/___ Time of Receipt: ___ : ___ (circle one) am/pm
Load Size (cu. yds./tons):

LOAD 3: Signature of Transporter Representative:
Date of Shipment: ___/___/___ Time of Shipment: ___ : ___ (circle one) am/pm
Truck/Tractor Registration: Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt: ___/___/___ Time of Receipt: ___ : ___ (circle one) am/pm
Load Size (cu. yds./tons):

LOAD 4: Signature of Transporter Representative:
Date of Shipment: ___/___/___ Time of Shipment: ___ : ___ (circle one) am/pm
Truck/Tractor Registration: Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt: ___/___/___ Time of Receipt: ___ : ___ (circle one) am/pm
Load Size (cu. yds./tons):

LOAD 5: Signature of Transporter Representative:
Date of Shipment: ___/___/___ Time of Shipment: ___ : ___ (circle one) am/pm
Truck/Tractor Registration: Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt: ___/___/___ Time of Receipt: ___ : ___ (circle one) am/pm
Load Size (cu. yds./tons):

LOAD 6: Signature of Transporter Representative:
Date of Shipment: ___/___/___ Time of Shipment: ___ : ___ (circle one) am/pm
Truck/Tractor Registration: Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt: ___/___/___ Time of Receipt: ___ : ___ (circle one) am/pm
Load Size (cu. yds./tons):

LOAD 7: Signature of Transporter Representative:
Date of Shipment: ___/___/___ Time of Shipment: ___ : ___ (circle one) am/pm
Truck/Tractor Registration: Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt: ___/___/___ Time of Receipt: ___ : ___ (circle one) am/pm
Load Size (cu. yds./tons):

LOG SHEET VOLUME INFORMATION:

Total Volume This Page (cu.yds./tons): 35.38
Total Carried Forward (cu.yds./tons): 112.68
Total Carried Forward and This Page(cu.yds./tons): 148.06

Massachusetts Department of Environmental Protection **BWSC-012B**

Bureau of Waste Site Cleanup

BILL OF LADING (pursuant to 310 CMR 40.0030) #56

LOG SHEET 5 **OF** 9

Release Tracking Number: 3 - 0173

I. LOAD INFORMATION:

LOAD 1: Signature of Transporter Representative:

Receiving Facility/Temporary Storage Representative:

Date of Shipment: 6/22/98 Time of Shipment: 9 : 30 (circle one) am/pm

Date of Receipt: 6/23/98 Time of Receipt: ___ : ___ (circle one) am/pm

Truck/Tractor Registration: 35040 Trailer Registration (if any): C5812

Load Size (cu. yds./tons): 68340 35.63

LOAD 2: Signature of Transporter Representative:

Receiving Facility/Temporary Storage Representative:

Date of Shipment: ___ / ___ / ___ Time of Shipment: ___ : ___ (circle one) am/pm

Date of Receipt: ___ / ___ / ___ Time of Receipt: ___ : ___ (circle one) am/pm

Truck/Tractor Registration: Trailer Registration (if any):

Load Size (cu. yds./tons):

LOAD 3: Signature of Transporter Representative:

Receiving Facility/Temporary Storage Representative:

Date of Shipment: ___ / ___ / ___ Time of Shipment: ___ : ___ (circle one) am/pm

Date of Receipt: ___ / ___ / ___ Time of Receipt: ___ : ___ (circle one) am/pm

Truck/Tractor Registration: Trailer Registration (if any):

Load Size (cu. yds./tons):

LOAD 4: Signature of Transporter Representative:

Receiving Facility/Temporary Storage Representative:

Date of Shipment: ___ / ___ / ___ Time of Shipment: ___ : ___ (circle one) am/pm

Date of Receipt: ___ / ___ / ___ Time of Receipt: ___ : ___ (circle one) am/pm

Truck/Tractor Registration: Trailer Registration (if any):

Load Size (cu. yds./tons):

LOAD 5: Signature of Transporter Representative:

Receiving Facility/Temporary Storage Representative:

Date of Shipment: ___ / ___ / ___ Time of Shipment: ___ : ___ (circle one) am/pm

Date of Receipt: ___ / ___ / ___ Time of Receipt: ___ : ___ (circle one) am/pm

Truck/Tractor Registration: Trailer Registration (if any):

Load Size (cu. yds./tons):

LOAD 6: Signature of Transporter Representative:

Receiving Facility/Temporary Storage Representative:

Date of Shipment: ___ / ___ / ___ Time of Shipment: ___ : ___ (circle one) am/pm

Date of Receipt: ___ / ___ / ___ Time of Receipt: ___ : ___ (circle one) am/pm

Truck/Tractor Registration: Trailer Registration (if any):

Load Size (cu. yds./tons):

LOAD 7: Signature of Transporter Representative:

Receiving Facility/Temporary Storage Representative:

Date of Shipment: ___ / ___ / ___ Time of Shipment: ___ : ___ (circle one) am/pm

Date of Receipt: ___ / ___ / ___ Time of Receipt: ___ : ___ (circle one) am/pm

Truck/Tractor Registration: Trailer Registration (if any):

Load Size (cu. yds./tons):

LOG SHEET VOLUME INFORMATION:

Total Volume This Page (cu.yds./tons): 35.63

Total Carried Forward (cu.yds./tons): 148.06

Total Carried Forward and This Page(cu.yds./tons): 183.69

Massachusetts Department of Environmental Protection **BWSC-012B**
Bureau of Waste Site Cleanup

BILL OF LADING (pursuant to 310 CMR 40.0030)
LOG SHEET 6 **OF** 9

Release Tracking Number: B - 0173

I. LOAD INFORMATION:

LOAD 1: Signature of Transporter Representative: Richard Bill
Receiving Facility/Temporary Storage Representative: R Gromy
Date of Shipment: 6/23/98 Time of Shipment: 8 : 00 (circle one) am/pm
Date of Receipt: 6/23/98 Time of Receipt: : (circle one) am/pm
Truck/Tractor Registration: 4930 AP NH
Trailer Registration (if any): 65817 MA
Load Size (cu. yds./tons): 68335 31.49

LOAD 2: Signature of Transporter Representative: Richard Bill
Receiving Facility/Temporary Storage Representative: R Gromy
Date of Shipment: 6/23/98 Time of Shipment: 1 : 15 (circle one) am/pm
Date of Receipt: 6/23/98 Time of Receipt: : (circle one) am/pm
Truck/Tractor Registration: 4930 AP
Trailer Registration (if any): 65817 MA
Load Size (cu. yds./tons): 68357 34.39

LOAD 3: Signature of Transporter Representative:
Receiving Facility/Temporary Storage Representative:
Date of Shipment: __/__/__ Time of Shipment: : (circle one) am/pm
Date of Receipt: __/__/__ Time of Receipt: : (circle one) am/pm
Truck/Tractor Registration:
Trailer Registration (if any):
Load Size (cu. yds./tons):

LOAD 4: Signature of Transporter Representative:
Receiving Facility/Temporary Storage Representative:
Date of Shipment: __/__/__ Time of Shipment: : (circle one) am/pm
Date of Receipt: __/__/__ Time of Receipt: : (circle one) am/pm
Truck/Tractor Registration:
Trailer Registration (if any):
Load Size (cu. yds./tons):

LOAD 5: Signature of Transporter Representative:
Receiving Facility/Temporary Storage Representative:
Date of Shipment: __/__/__ Time of Shipment: : (circle one) am/pm
Date of Receipt: __/__/__ Time of Receipt: : (circle one) am/pm
Truck/Tractor Registration:
Trailer Registration (if any):
Load Size (cu. yds./tons):

LOAD 6: Signature of Transporter Representative:
Receiving Facility/Temporary Storage Representative:
Date of Shipment: __/__/__ Time of Shipment: : (circle one) am/pm
Date of Receipt: __/__/__ Time of Receipt: : (circle one) am/pm
Truck/Tractor Registration:
Trailer Registration (if any):
Load Size (cu. yds./tons):

LOAD 7: Signature of Transporter Representative:
Receiving Facility/Temporary Storage Representative:
Date of Shipment: __/__/__ Time of Shipment: : (circle one) am/pm
Date of Receipt: __/__/__ Time of Receipt: : (circle one) am/pm
Truck/Tractor Registration:
Trailer Registration (if any):
Load Size (cu. yds./tons):

LOG SHEET VOLUME INFORMATION:

Total Volume This Page (cu.yds./tons): 34.38
Total Carried Forward (cu.yds./tons): 183.69
Total Carried Forward and This Page(cu.yds./tons): 218.07

ATLA

Massachusetts Department of Environmental Protection **BWSC-012B**
Bureau of Waste Site Cleanup

BILL OF LADING (pursuant to 310 CMR 40.0030)
LOG SHEET 2 **OF** 9

Release Tracking Number: B - 0173

I. LOAD INFORMATION:

LOAD 1: Signature of Transporter Representative:

Date of Shipment: 6/22/98 Time of Shipment: 7 : 40 (circle one) am/pm

Truck/Tractor Registration: AP3160 NH Trailer Registration (if any): 65872 MA

Receiving Facility/Temporary Storage Representative:

Date of Receipt: 6/23/98 Time of Receipt: 9:44 (circle one) am/pm

Load Size (cu. yds./tons): 83330 39.10

LOAD 2: Signature of Transporter Representative:

Date of Shipment: 6/23/98 Time of Shipment: ___ : ___ (circle one) am/pm

Truck/Tractor Registration: AP3160 NH Trailer Registration (if any): 65872 MA.

Receiving Facility/Temporary Storage Representative:

Date of Receipt: 6/23/98 Time of Receipt: ___ : ___ (circle one) am/pm

Load Size (cu. yds./tons): 83521 35.77

LOAD 3: Signature of Transporter Representative:

Date of Shipment: ___/___/___ Time of Shipment: ___ : ___ (circle one) am/pm

Truck/Tractor Registration: Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt: ___/___/___ Time of Receipt: ___ : ___ (circle one) am/pm

Load Size (cu. yds./tons):

LOAD 4: Signature of Transporter Representative:

Date of Shipment: ___/___/___ Time of Shipment: ___ : ___ (circle one) am/pm

Truck/Tractor Registration: Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt: ___/___/___ Time of Receipt: ___ : ___ (circle one) am/pm

Load Size (cu. yds./tons):

LOAD 5: Signature of Transporter Representative:

Date of Shipment: ___/___/___ Time of Shipment: ___ : ___ (circle one) am/pm

Truck/Tractor Registration: Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt: ___/___/___ Time of Receipt: ___ : ___ (circle one) am/pm

Load Size (cu. yds./tons):

LOAD 6: Signature of Transporter Representative:

Date of Shipment: ___/___/___ Time of Shipment: ___ : ___ (circle one) am/pm

Truck/Tractor Registration: Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt: ___/___/___ Time of Receipt: ___ : ___ (circle one) am/pm

Load Size (cu. yds./tons):

LOAD 7: Signature of Transporter Representative:

Date of Shipment: ___/___/___ Time of Shipment: ___ : ___ (circle one) am/pm

Truck/Tractor Registration: Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:

Date of Receipt: ___/___/___ Time of Receipt: ___ : ___ (circle one) am/pm

Load Size (cu. yds./tons):

LOG SHEET VOLUME INFORMATION:

Total Volume This Page (cu.yds./tons): 35.77

Total Carried Forward (cu.yds./tons): 218.07

Total Carried Forward and This Page(cu.yds./tons): 253.84

Massachusetts Department of Environmental Protection **BWSC-012B**
Bureau of Waste Site Cleanup

BILL OF LADING (pursuant to 310 CMR 40.0030) #16
LOG SHEET 8 **OF** 9

Release Tracking Number: 3 - 0173

I. LOAD INFORMATION:

LOAD 1: Signature of Transporter Representative:
Date of Shipment: 6/23/98 Time of Shipment: 8 : 15 (circle one) am/pm
Truck/Tractor Registration: 19185 MA Trailer Registration (if any): 29308 MA
Receiving Facility/Temporary Storage Representative:
Date of Receipt: 6/23/98 Time of Receipt: ___ : ___ (circle one) am/pm
Load Size (cu. yds./tons): 35.38

LOAD 2: Signature of Transporter Representative:
Date of Shipment: 6/29/98 Time of Shipment: 1 : 20 (circle one) am/pm
Truck/Tractor Registration: 19185 MA Trailer Registration (if any): 29308 MA
Receiving Facility/Temporary Storage Representative:
Date of Receipt: 6/29/98 Time of Receipt: ___ : ___ (circle one) am/pm
Load Size (cu. yds./tons): 31.34

LOAD 3: Signature of Transporter Representative:
Date of Shipment: ___/___/___ Time of Shipment: ___ : ___ (circle one) am/pm
Truck/Tractor Registration: Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt: ___/___/___ Time of Receipt: ___ : ___ (circle one) am/pm
Load Size (cu. yds./tons):

LOAD 4: Signature of Transporter Representative:
Date of Shipment: ___/___/___ Time of Shipment: ___ : ___ (circle one) am/pm
Truck/Tractor Registration: Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt: ___/___/___ Time of Receipt: ___ : ___ (circle one) am/pm
Load Size (cu. yds./tons):

LOAD 5: Signature of Transporter Representative:
Date of Shipment: ___/___/___ Time of Shipment: ___ : ___ (circle one) am/pm
Truck/Tractor Registration: Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt: ___/___/___ Time of Receipt: ___ : ___ (circle one) am/pm
Load Size (cu. yds./tons):

LOAD 6: Signature of Transporter Representative:
Date of Shipment: ___/___/___ Time of Shipment: ___ : ___ (circle one) am/pm
Truck/Tractor Registration: Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt: ___/___/___ Time of Receipt: ___ : ___ (circle one) am/pm
Load Size (cu. yds./tons):

LOAD 7: Signature of Transporter Representative:
Date of Shipment: ___/___/___ Time of Shipment: ___ : ___ (circle one) am/pm
Truck/Tractor Registration: Trailer Registration (if any):
Receiving Facility/Temporary Storage Representative:
Date of Receipt: ___/___/___ Time of Receipt: ___ : ___ (circle one) am/pm
Load Size (cu. yds./tons):

LOG SHEET VOLUME INFORMATION:

Total Volume This Page (cu.yds./tons): 31.34
Total Carried Forward (cu.yds./tons): 253.84
Total Carried Forward and This Page(cu.yds./tons): 285.18

#19

Massachusetts Department of Environmental Protection **BWSC-012B**
Bureau of Waste Site Cleanup

BILL OF LADING (pursuant to 310 CMR 40.0030)
LOG SHEET 9 **OF** 9

Release Tracking Number: 3 - 0173

I. LOAD INFORMATION:

LOAD 1: Signature of Transporter Representative: [signature]
Receiving Facility/Temporary Storage Representative: K. Gramyk
Date of Shipment: 11/23/98 Time of Shipment: 2:15 (circle one) am/pm
Date of Receipt: 11/23/98 Time of Receipt: [illegible] (circle one) am/pm
Truck/Tractor Registration: 19184 MS Trailer Registration (if any): 65824 MS
Load Size (cu. yds./tons): 29.57

LOAD 2: Signature of Transporter Representative:
Receiving Facility/Temporary Storage Representative:
Date of Shipment: __/__/__ Time of Shipment: __:__ (circle one) am/pm
Date of Receipt: __/__/__ Time of Receipt: __:__ (circle one) am/pm
Truck/Tractor Registration: Trailer Registration (if any):
Load Size (cu. yds./tons):

LOAD 3: Signature of Transporter Representative:
Receiving Facility/Temporary Storage Representative:
Date of Shipment: __/__/__ Time of Shipment: __:__ (circle one) am/pm
Date of Receipt: __/__/__ Time of Receipt: __:__ (circle one) am/pm
Truck/Tractor Registration: Trailer Registration (if any):
Load Size (cu. yds./tons):

LOAD 4: Signature of Transporter Representative:
Receiving Facility/Temporary Storage Representative:
Date of Shipment: __/__/__ Time of Shipment: __:__ (circle one) am/pm
Date of Receipt: __/__/__ Time of Receipt: __:__ (circle one) am/pm
Truck/Tractor Registration: Trailer Registration (if any):
Load Size (cu. yds./tons):

LOAD 5: Signature of Transporter Representative:
Receiving Facility/Temporary Storage Representative:
Date of Shipment: __/__/__ Time of Shipment: __:__ (circle one) am/pm
Date of Receipt: __/__/__ Time of Receipt: __:__ (circle one) am/pm
Truck/Tractor Registration: Trailer Registration (if any):
Load Size (cu. yds./tons):

LOAD 6: Signature of Transporter Representative:
Receiving Facility/Temporary Storage Representative:
Date of Shipment: __/__/__ Time of Shipment: __:__ (circle one) am/pm
Date of Receipt: __/__/__ Time of Receipt: __:__ (circle one) am/pm
Truck/Tractor Registration: Trailer Registration (if any):
Load Size (cu. yds./tons):

LOAD 7: Signature of Transporter Representative:
Receiving Facility/Temporary Storage Representative:
Date of Shipment: __/__/__ Time of Shipment: __:__ (circle one) am/pm
Date of Receipt: __/__/__ Time of Receipt: __:__ (circle one) am/pm
Truck/Tractor Registration: Trailer Registration (if any):
Load Size (cu. yds./tons):

LOG SHEET VOLUME INFORMATION:

Total Volume This Page (cu.yds./tons): 29.57
Total Carried Forward (cu.yds./tons): 285.18
Total Carried Forward and This Page(cu.yds./tons): 314.75

Massachusetts Department of Environmental Protection **BWSC-012C**
Bureau of Waste Site Cleanup

BILL OF LADING (pursuant to 310 CMR 40.0030)
SUMMARY SHEET 1 **OF** 1

Release Tracking Number: 3-0173

K. SUMMARY OF SHIPMENTS:

DATE OF SHIPMENT:	DATE OF RECEIPT:	NUMBER OF LOADS SHIPPED:	DAILY VOLUME SHIPPED (CU. YDS./TONS):
6-23-98	6-23-98	7	253.84
6-24-98	6-24-98	2	60.91

SUMMARY SHEET TOTAL SHIPPED:	9	314.75
BILL OF LADING TOTALSHIPPED (only if different):		

7. Excavate, stockpile, screen, load, transport, and dispose of material from Areas 4, 7, and 10 designated by the Engineer for disposal. Characterize materials utilizing disposal facility profile forms to obtain approvals for disposal, as required.

8. Place geotextile fabric over limits of consolidated material in Area 10 and cover with 2 feet of clean sand from the onsite source. Place 1 foot of clean sand from the onsite source over all other excavated portions of Area 10.

9. Demobilize all equipment and remove temporary facilities (except the erosion control) from the site. Clean up all areas within the limits of work and dispose of all materials in accordance with all applicable regulations.

D. Comply with the requirements of the Norfolk Conservation Commission as stated in the Order of Conditions (See Appendix A to this Specification).

E. Obtain all local, State, and Federal permits that may be required for the transporting and disposal of contaminated material and any liquid wastes generated by the Contractor resulting from the performance of this work. Ensure that the disposal facilities proposed have all licenses and permits required by local, State, and Federal regulatory agencies to receive and dispose of wastes resulting from the performance of this work.

F. Obtain a permit from the Town of Norfolk to burn stumps removed during the excavation.

1.03 SITE HISTORY

A. Buckley & Mann, Inc. (B&M) manufactured textile products at its facility northwest of the junction of Park and Lawrence Streets in Norfolk, MA for over 90 years. The company operated a small dyehouse which discharged wastewater to two lagoons for settling and facultative biological treatment and a carbonizer process, in addition to its dry textile manufacturing operations.

Until it was discontinued and demolished in about 1965, the carbonizer was part of a process to reclaim wool from old garments by passing the stock through acidic steam. This charred the cotton threads on the seams, zippers, buttons, etc. and facilitated their separation from the wool. The wool was then neutralized and rinsed, and the solid residues were discarded, mostly on-site. The wastewater from the neutralization and rinsing was discharged via a shallow ditch to the Carbonizer lagoon for settling and facultative biological treatment. The solid waste from the carbonizer process, mixed with coal ash, building demolition debris and sand were disposed of in Area 10 (see Drawing C-1).

The dyehouse operations were discontinued in June, 1986. Over the last 10 years of operation (ending in 1986), about 90% of the work was polyester fiber processed with disperse dyes. Of the remainder, basic dyes accounted for about 8% and acid dyes for the other 2%. In earlier years, chrome dyes were applied to wool. The total wastewater flow was estimated by B&M at 30,000 to 40,000 gallons per week. The wastewater was discharged via a ditch to Lagoon #1 for settling and facultative biological treatment. The contaminated soils in Areas 3, 4,5, 6, and 7 contain residues from the dyehouse.

In 1978, B&M constructed two new lagoons to supplement Lagoon #1. Lagoon #2 received the overflow from Lagoon #1. Lagoon #3 remains as a groundwater diversion ditch and never received wastewater.

TABLE SPEC 3

Buckley Mann

Summary of Analytical Data for Material to be Disposed of Off-Site [1,2]

(Samples collected October 25-26, 1995. All Results in mg/kg unless otherwise noted.)

BOL

	Soil Reuse Levels at Lined Landfills	Areas 4 and 7 (Drum Material)		Area 10	Average
		BM-DM-C1	BM-DM-C2	BM-TP10-RB	
Volatile Organic Compounds[3]					
Acetone		NA	NA	< 0.060	ND
1,4-dichlorobenzene		NA	NA	< 0.0030	ND
Chlorobenzene		NA	NA	< 0.0030	ND
1,3-dichlorobenzene		NA	NA	< 0.0030	ND
1,2-dichlorobenzene		NA	NA	< 0.0030	ND
Ethylbenzene		NA	NA	< 0.0030	ND
Tetrachloroethene		NA	NA	< 0.0030	ND
Total Xylenes		NA	NA	< 0.0030	ND
Total VOCs	10				ND
Acid/Base Neutral Compounds[3]					
Carbazole		< 8.8	< 3.5	< 0.48	ND
2-methylnaphthalene		130	44	< 0.24	58
Naphthalene		12	4.0	< 0.24	5.3
Acenaphthene		35	18	< 0.24	18
Acenaphthylene		< 4.4	< 1.8	< 0.24	ND
Fluorene		18	8.0	< 0.24	8.7
Anthracene		< 4.4	< 1.8	< 0.24	ND
Fluoranthene		< 4.4	< 1.8	< 0.24	ND
Hexachlorobenzene		< 4.4	< 1.8	3.3	ND
Phenanthrene		7.6	3.8	< 0.24	3.8
1,2,4-trichlorobenzene		35	16	< 0.24	17
Dibenzofuran		23	9.8	< 0.24	10.9
Diethylphthalate		< 4.4	2.0	0.39	0.8
Bis(2-ethylhexyl)phthalate		< 4.4	3.7	< 0.24	1.2
Benzo(a)anthracene		< 4.4	< 1.8	< 0.24	ND
Chrysene		< 4.4	< 1.8	< 0.24	ND
Pyrene		< 4.4	< 1.8	< 0.24	ND
Benzo(b)fluoranthene		< 4.4	< 1.8	< 0.24	ND
Benzo(k)fluoranthene		< 4.4	< 1.8	< 0.24	ND
Benzo(g,h,i)perylene		< 4.4	< 1.8	< 0.24	ND
Benzo(a)pyrene		< 4.4	< 1.8	< 0.24	ND
Indeno(1,2,3-cd)pyrene		< 4.4	< 1.8	< 0.24	ND
Dibenzo(a,h)anthracene		< 4.4	< 1.8	< 0.24	ND
TPH	5,000	5,100	6,000	130	3,700
PAH, total of compds with	100	226	88	ND	104
RCRA 8 Metals					
Silver		< 2.0	< 2.0	< 2.0	ND
Arsenic	40	17	10	34	9.0
Barium		31	25	1,300	19
Cadmium	80	< 1.0	< 1.0	< 20	ND
Chromium	1,000	1,300	920	1,900	1,370
Mercury	10	< 0.30	< 0.30	< 1.7	ND
Lead	2,000	23	16	5,000	1,680
Selenium		< 1.0	< 1.0	< 1.2	ND

Legend

NA, Not Analyzed

NL, Value Not Listed

Notes

1. Concentration in boxes exceed Soil Reuse Levels for daily cover at a lined landfill
2. If a compound was not detected in a sample, then the detection limit is shown next to the less-than symbol. Detection limits were not used in the calculation of the average concentration.
3. Only those compounds detected in at least one sample anywhere on the site are listed. For VOCs, none were detected in the areas subject to this contract.

WASTE MANAGEMENT OF NEW HAMPSHIRE, INC
90 ROCHESTER NECK ROAD, ROCHESTER, NH
(603)330-2134

647335
DATE: 06/23/1998
TIME: 10:11-10:26

CUSTOMER: 135 FLEET ENVIRONMENTAL SERVICES, INC. TRUCK: SUH

HAULER: WEIGH MASTER: KIM GROMKO

WASTE: SPW CONTAMINATED SOIL ORIGIN: MA MASSACHUSETTS

PROFILE: 484093 DEBRIS & SOIL GEN: G710 BUCKLEY & MANN

GROSS: 99440 LBS
TARE: 36460 LBS
NET: 62980 LBS = 31.49 TONS

TO THE BEST OF MY KNOWLEDGE THIS TRUCK CONTAINS NO HAZARDOUS OR UNACCEPTABLE WASTE

OUT-OF-STATE SOLID WASTE TRANSPORTER DECLARATION: I certify under penalty of perjury that the information provided is true and correct to the best of my knowledge and belief.

PRINT COMPANY: _____ 06072-01
ORDER NUMBER:

PRINT NAME: _____ SIGN: _____

WASTE MANAGEMENT OF NEW HAMPSHIRE, INC. # 683320
TURNKEY LANDFILL OPERATION
90 ROCHESTER NECK ROAD, ROCHESTER, NH DATE: 05/23/1998
(603)330-2134 TIME: 09:44-10:25

CUSTOMER: 135 FLEET ENVIRONMENTAL SERVICES, INC. TRUCK: ATLA

HAULER: WEIGH MASTER: KIM GROSYKO

WASTE: SPW CONTAMINATED SOIL ORIGIN: 02 MASSACHUSETTS

PROFILE: 484095 DEBRIS & SOIL GEN: 6719 BUCKLEY & MANN

GROSS: 114060 LBS
TARE: 35360 LBS
NET: 78700 LBS = 39.10 TONS

TO THE BEST OF MY KNOWLEDGE THIS TRUCK CONTAINS NO HAZARDOUS OR UNACCEPTABLE WASTE

OUT-OF-STATE SOLID WASTE TRANSPORTER DECLARATION: I certify under penalty of perjury that the information provided is true and correct to the best of my knowledge and belief.

PRINT COMPANY: ATLANTIC 000177
ORDER NUMBER:

PRINT NAME: JOHN HENSON SIGN:

3 of 9

WASTE MANAGEMENT OF NEW HAMPSHIRE, INC
TURNKEY LANDFILL DIVISION
90 ROCHESTER NECK ROAD, ROCHESTER, NH
(603)330-2134

683353
DATE: 06/23/1998
TIME: 10:48:11:05

CUSTOMER: 135 FLEET ENVIRONMENTAL SERVICES, INC. TRUCK: 19

HAULER:

WEIGH MASTER: KIM GRONYKO

WASTE: SPW CONTAMINATED SOIL ORIGIN: 02 MASSACHUSETTS

PROFILE: 484095 DEBRIS & SOIL GEN: 6719 BUCKLEY & MANN

GROSS: 123520 LBS
TARE: 39340 LBS
NET: 84180 LBS = 42.09 TONS

TO THE BEST OF MY KNOWLEDGE THIS TRUCK CONTAINS NO HAZARDOUS OR UNACCEPTABLE WASTE

OUT-OF-STATE SOLID WASTE TRANSPORTER DECLARATION: I certify under penalty of perjury that the information provided is true and correct to the best of my knowledge and belief.

PRINT COMPANY: _____ 000772.
ORDER NUMBER:

PRINT NAME: _____ SIGN: John Sullivan

4 of 9

WASTE MANAGEMENT OF NEW HAMPSHIRE, INC. # 68337
TURNKEY LANDFILL DIVISION
99 ROCHESTER NECK ROAD, ROCHESTER, NH DATE: 06/23/1998
(603)330-2134 TIME: 10:44-11:09

CUSTOMER: 135 FLEET ENVIRONMENTAL SERVICES, INC. TRUCK: 1
WEIGH
HAULER: MASTER: KIM GROMYKO

WASTE: BPW CONTAMINATED SOIL ORIGIN: 02 MASSACHUSETTS

PROFILE: 484095 DEBRIS / SOIL GEN: 6719 BUCKLEY & MANN

GROSS: 107220 LBS
TARE: 36460 LBS
NET: 70760 LBS = 35.38 TONS

TO THE BEST OF MY KNOWLEDGE THIS TRUCK CONTAINS NO HAZARDOUS OR UNACCEPTABLE WASTE

OUT-OF-STATE SOLID WASTE TRANSPORTER DECLARATION: I certify under penalty of perjury that the information provided is true and correct to the best of my knowledge and belief.

PRINT COMPANY: _____
ORDER NUMBER:

PRINT NAME: _____ SIGN: _____

WASTE MANAGEMENT OF NEW HAMPSHIRE, INC # 683408
90 ROCHESTER NECK ROAD, ROCHESTER, NH DATE: 05/23/1995
(603)330-2134 TIME: 12:06-12:25

CUSTOMER: 135 FLEET ENVIRONMENTAL SERVICES, INC. TRUCK: 56

HAULER: WEIGH MASTER: KIM GROMYKO

WASTE: SPW CONTAMINATED SOIL ORIGIN: 02 MASSACHUSETTS

PROFILE: 484035 DEBRIS & SOIL GEN: 0719 BUCKLEY & MANN

GROSS: 109000 LBS
TARE: 37740 LBS

NET: 71260 LBS = 35.63 TONS

TO THE BEST OF MY KNOWLEDGE THIS TRUCK CONTAINS NO HAZARDOUS OR UNACCEPTABLE WASTE.

OUT OF-STATE SOLID WASTE TRANSPORTER DECLARATION: I certify under penalty of perjury that the information provided is true and correct to the best of my knowledge and belief.

PRINT COMPANY: Sam's Transportation #56 8807721
ORDER NUMBER:

PRINT NAME: Roy Richard SIGN: [signature]

WASTE MANAGEMENT OF NEW HAMPSHIRE, INC
TURNKEY LANDFILL DIVISION
90 ROCHESTER NECK ROAD, ROCHESTER, NH
(603)330-2134

583517
DATE: 05/23/1998
TIME: 13:19-13:42

CUSTOMER: 135 FLEET ENVIRONMENTAL SERVICES, INC
TRUCK: 804

HAULER:

WEIGH MASTER: KIM GROMYKO

WASTE: SPW CONTAMINATED SOIL

ORIGIN: 02 MASSACHUSETTS

PROFILE: 484093 DEBRIS & SOIL

GEN: 6710 BUCKLEY & MANN

GROSS: 10,340 LBS
TARE: 7,360 LBS
NET: 68740 LBS = 34.38 TONS

TO THE BEST OF MY KNOWLEDGE THIS TRUCK CONTAINS NO HAZARDOUS OR UNACCEPTABLE WASTE

OUT-OF-STATE SOLID WASTE TRANSPORTER DECLARATION: I certify under penalty of perjury that the information provided is true and correct to the best of my knowledge and belief.

THIRD COMPANY:
ORDER NUMBER:

0007723

PRINT NAME:

SIGN:

WASTE MANAGEMENT OF NEW HAMPSHIRE, INC
90 ROCHESTER NECK ROAD, ROCHESTER, NH
(603)330-2134

603521
DATE: 06/23/1998
TIME: 10:26-10:45

CUSTOMER: 133 FLEET ENVIRONMENTAL SERVICES, INC. TRUCK: ATLA

HAULER:

WEIGH MASTER: KIM GROMYKO

WASTE: SPW CONTAMINATED SOIL ORIGIN: 02 MASSACHUSETTS

PROFILE: 484093 DEBRIS & SOIL GEN. 5719 BUCKLEY & MANN

GROSS: 107060 LBS
TARE: 35520 LBS
NET: 71540 LBS = 35.77 TONS

TO THE BEST OF MY KNOWLEDGE THIS TRUCK CONTAINS NO HAZARDOUS OR UNACCEPTABLE WASTE

OUT-OF-STATE SOLID WASTE TRANSPORTER DECLARATION: I certify under penalty of perjury that the information provided is true and correct to the best of my knowledge and belief.

PRINT COMPANY: ATLANTIC
ORDER NUMBER: 00077721

PRINT NAME: JOHN HEWSON SIGN:

WASTE MANAGEMENT OF NEW HAMPSHIRE, INC
RochesterLandfill Division
96 ROCHESTER NECK ROAD, ROCHESTER, NH
(603)335-2154

6875B1

DATE: 06/24/1998
TIME: 06:29-07:01

CUSTOMER: 105 FLEET ENVIRONMENTAL SERVICES, INC. TRUCK: 19

HAULER: WEIGH MASTER: KIM GROMYKO

WASTE: SPH CONTAMINATED SOIL ORIGIN: 02 MASSACHUSETTS

PROFILE: 484095 DEBRIS & SOIL GEN: 6719 BUCKLEY & MANN

GROSS: 98400 LBS
TARE: 39260 LBS
NET: 59140 LBS = 29.57 TONS

TO THE BEST OF MY KNOWLEDGE THIS TRUCK CONTAINS NO HAZARDOUS OR UNACCEPTABLE WASTE

OUT-OF-STATE SPECIAL WASTE TRANSPORTER DECLARATION: I certify under penalty of perjury, that the information provided is true and correct to the best of my knowledge and belief.

PRINT COMPANY: _____ 06/07/21

ORDER NUMBER: _____

PRINT NAME: _____ SIGN: John Sullivan

Norfolk
17 Lawrence St.
3-0173

BUCKLEY & MANN, INC.
14 Bush Pond Road
Norfolk, MA 02056

SCANNED

September 22, 1997

Department of Environmental Protection
Northeast Regional Office
10 Commerce Way
Woburn, MA 01801

Enclosed please find a 120 day Status Report for the Release Abatement Measure at the Buckley & Mann property in Norfolk, Massachusetts. The site is Bureau of Waste Site Cleanup #3-0173.

If you have any questions, please contact either Stephen or Richard Mann at (781) 828-0029, X3427 or X3442.

Stephen L. Mann

RELEASE ABATEMENT MEASURE (RAM) PLAN STATUS REPORT
for
BUCKLEY & MANN, INC., NORFOLK, MASSACHUSETTS

BUREAU OF WASTE SITE CLEAN-UP SITE NUMBER 3-0173

Prepared by

CAMP DRESSER & McKEE INC.
CAMBRIDGE, MASSACHUSETTS

September 1997

Robert A. Dangel
Licensed Site Professional # 7798

William R. Swanson
Licensed Site Professional # 6406

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC-106

RELEASE & UTILITY-RELATED ABATEMENT MEASURE (RAM & URAM) TRANSMITTAL FORM

Pursuant to 310 CMR 40.0444 - 0446 and 310 CMR 40.0462 - 0465 (Subpart D)

Release Tracking Number: 3 - 173

A. SITE LOCATION:

Site Name: (optional) Buckley and Mann, Inc.

Street: 17 Lawrence Street Location Aid: Bush Pond

City/Town: Norfolk, Massachusetts ZIP Code: 02056-0000

☐ Check here if a Tier Classification Submittal has been provided to DEP for this Release Tracking Number.

Related Release Tracking Numbers That This RAM or URAM Addresses: _____

B. THIS FORM IS BEING USED TO: (check all that apply)

RECEIVED
SEP 26 1997
DEP/NORTHEAST REGION
WOBURN, MASS.

☐ Submit a **RAM Plan** (complete Sections A, B, C, D, E, F, J, K, L and M).

☐ Check here if this RAM Plan is an update or modification of a previously approved written RAM Plan. Date Submitted: _____

☑ Submit a **RAM Status Report** (complete Sections A, B, C, E, J, K, L and M).

☐ Submit a **RAM Completion Statement** (complete Sections A, B, C, D, E, G, J, K, L and M).

☐ Confirm or Provide **URAM Notification** (complete Sections A, B, H, K, L and M).

☐ Submit a **URAM Status Report** (complete Sections A, B, C, E, J, K, L and M).

☐ Submit a **URAM Completion Statement** (complete Sections A, B, C, D, E, I, J, K, L and M).

You must attach all supporting documentation required for each use of form indicated, including copies of any Legal Notices and Notices to Public Officials required by 310 CMR 40.1400.

C. SITE CONDITIONS:

☑ Check here if the source of the Release or Threat of Release is known.

If yes, check all sources that apply: ☐ UST ☐ Pipe/Hose/Line ☐ AST ☐ Drums ☐ Transformer ☐ Boat

☐ Tanker Truck ☐ Vehicle ☑ Other Specify: Bldg debris, coal ash and textile plant wastes

Identify Media and Receptors Affected: (check all that apply) ☐ Air ☐ Groundwater ☐ Surface Water ☐ Sediments ☐ Soil

☐ Wetlands ☐ Storm Drain ☐ Paved Surface ☐ Private Well ☐ Public Water Supply ☐ Zone 2 ☐ Residence

☐ School ☐ Unknown ☐ Other Specify: _____

Identify Release and/or Threat of Release Conditions at Site: (check all that apply)

☐ 2 and 72 Hour Reporting Condition(s) ☑ 120 Day Reporting Condition(s) ☐ Other Condition(s)

Describe: Metals, PAH and TPH from building debris, coal ash and textile plant wastes

RAMs may be conducted concurrently with an IRA only with written DEP approval
URAMs may not be conducted if any 2 or 72 Hour conditions exist at the site.

Identify Oils and Hazardous Materials Released: (check all that apply) ☐ Oils ☐ Chlorinated Solvents ☑ Heavy Metals

☑ Others Specify: PAH, TPH

D. DESCRIPTION OF RESPONSE ACTIONS: (check all that apply)

☐ Assessment and/or Monitoring Only

☐ Excavation of Contaminated Soils

☐ Re-use, Recycling or Treatment

○ On Site ○ Off Site Est. Vol.: _____ cubic yards

Describe: _____

☐ Store ○ On Site ○ Off Site Est. Vol.: _____ cubic yards

☐ Deployment of Absorbant or Containment Materials

☐ Temporary Covers or Caps

☐ Bioremediation

☐ Soil Vapor Extraction

☐ Structure Venting System

☐ Product or NAPL Recovery

SECTION D IS CONTINUED ON THE NEXT PAGE.

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC-106

RELEASE & UTILITY-RELATED ABATEMENT MEASURE (RAM & URAM) TRANSMITTAL FORM

Pursuant to 310 CMR 40.0444 - 0446 and 310 CMR 40.0462 - 0465 (Subpart D)

Release Tracking Number: 3 - 173

D. DESCRIPTION OF RESPONSE ACTIONS (continued):

☐ Landfill ○ Cover ○ Disposal Est. Vol.: _____ cubic yards

☐ Removal of Drums, Tanks or Containers

Describe: _____

☐ Removal of Other Contaminated Media

Specify Type and Volume: _____

☐ Other Response Actions Describe: _____

☐ Groundwater Treatment Systems

☐ Air Sparging

☐ Temporary Water Supplies

☐ Temporary Evacuation or Relocation of Residents

☐ Fencing and Sign Posting

See 310 CMR 40.0442 for limitations on the scope and type of RAMs.
See 310 CMR 40.0464 for performance standards for URAMs.

☐ Check here if this RAM or URAM involves the use of Innovative Technologies. DEP is interested in using this information to aid in creating an Innovative Technologies Clearinghouse.

Describe Technologies: _____

E. TRANSPORT OF REMEDIATION WASTE:

(if Remediation Waste has been sent to an off-site facility, answer the following questions)

Name of Facility: _____

Town and State: _____

Quantity of Remediation Waste Transported to Date: NONE

F. RAM PLAN:

☐ Check here if this RAM Plan received previous oral approval from DEP as a continuation of a Limited Removal Action (LRA).

Date of Oral Approval: _____

☐ If a RAM Compliance Fee is required, check here to certify that the fee has been submitted. You **MUST** attach a photocopy of the payment. See 310 CMR 40.0444(2) to learn when a fee is not required.

☐ Check here if the RAM Plan is proposed for a Transition Site. If this is the case, you may need to attach an LSP Evaluation Opinion prior to undertaking the RAM, if not previously provided. See 310 CMR 40.0600 for further information about Transition Sites.

G. RAM COMPLETION STATEMENT:

☐ If a RAM Compliance Fee is required in connection with submission of the RAM Completion Statement, check here to certify that the fee has been submitted. You **MUST** attach a photocopy of the payment. You owe this fee when submitting a RAM Completion Statement if you received oral approval of a RAM that continued an LRA, and have NOT previously submitted a RAM Plan and accompanying fee.

If any Remediation Waste will be stored, treated, managed, recycled or reused at the site following submission of the RAM Completion Statement, you must submit a Phase IV Remedy Implementation Plan, along with the appropriate transmittal form, as an attachment to the RAM Completion Statement.

H. URAM NOTIFICATION:

Identify Location Type: (check all that apply) ☐ Public Right of Way ☐ Utility Easement ☐ Private Property

Identify Utility Type: (check all that apply) ☐ Sanitary/Combined Sewerage ☐ Water ☐ Drainage ☐ Natural Gas ☐ Telephone ☐ Steam Lines ☐ Telecommunications ☐ Electric ☐ Other Specify: _____

☐ Check here if you provided DEP with previous oral notification of this URAM. Date of Oral Notice: _____

☐ Check here if the property owner was NOT contacted prior to initiation of the URAM. If this is the case, you must attach an explanation of why the owner was not contacted, including the date and time when contact ultimately occurred.

☐ Check here if this URAM will occur in connection with the construction of new public utilities. If this is the case, document the nature and extent of encountered contamination, the scope and expense of necessary mitigation and the benefits and limitations of project alternatives.

With the exception stated below, the person undertaking the URAM must provide the name and license number of an LSP engaged or employed in connection with the URAM:

LSP Name: _____ LSP License Number: _____

LSP information is not required if the URAM is limited to the excavation and/or handling of not more than 100 cubic yards of soil contaminated by Oil, or not more than 20 cubic yards of soil contaminated either by a Hazardous Material or a mixture of a Hazardous Material and Oil.

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC-106

RELEASE & UTILITY-RELATED ABATEMENT MEASURE (RAM & URAM) TRANSMITTAL FORM

Pursuant to 310 CMR 40.0444 - 0446 and 310 CMR 40.0462 - 0465 (Subpart D)

Release Tracking Number: 3 - 173

I. URAM COMPLETION STATEMENT:

☐ Check here if this URAM was limited to the excavation and/or handling of not more than 100 cubic yards of soil contaminated by Oil, or not more than 20 cubic yards of soil contaminated by either a Hazardous Material or a mixture of a Hazardous Material and Oil.

If any Remediation Waste will be stored, treated, managed, recycled or reused at the site following submission of the URAM Completion Statement, you must submit either a Release Abatement Measure (RAM) Plan or a Phase IV Remedy Implementation Plan, along with the appropriate transmittal form, as an attachment to the URAM Completion Statement.

J. LSP OPINION:

I attest under the pains and penalties of perjury that I have personally examined and am familiar with this transmittal form, including any and all documents accompanying this submittal. In my professional opinion and judgment based upon application of (i) the standard of care in 309 CMR 4.02(1), (ii) the applicable provisions of 309 CMR 4.02(2) and (3), and (iii) the provisions of 309 CMR 4.03(5), to the best of my knowledge, information and belief,

> *If Section B of this form indicates that a **Release Abatement Measure Plan** is being submitted,* the response action(s) that is (are) the subject of this submittal (i) has (have) been developed in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) complies(y) with the identified provisions of all orders, permits, and approvals identified in this submittal;

> *If Section B of this form indicates that a **Release Abatement Measure Status Report** or a **Utility-Related Abatement Measure Status Report** is being submitted,* the response action(s) that is (are) the subject of this submittal (i) is (are) being implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) complies(y) with the identified provisions of all orders, permits, and approvals identified in this submittal;

> *If Section B of this form indicates that a **Release Abatement Measure Completion Statement** or a **Utility-Related Abatement Measure Completion Statement** is being submitted,* the response action(s) that is (are) the subject of this submittal (i) has (have) been developed and implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) complies(y) with the identified provisions of all orders, permits, and approvals identified in this submittal;

I am aware that significant penalties may result, including, but not limited to, possible fines and imprisonment, if I submit information which I know to be false, inaccurate or materially incomplete.

☐ Check here if the Response Action(s) on which this opinion is based, if any, are (were) subject to any order(s), permit(s) and/or approval(s) issued by DEP or EPA. If the box is checked, you MUST attach a statement identifying the applicable provisions thereof.

LSP Name: William R. Swanson LSP #: 6406 Stamp:

Telephone: 617-252-8000 Ext: 8458

FAX: (optional) 617-621-2565

Signature: William R Swanson

Date: 9/18/97

COMMONWEALTH OF MASSACHUSETTS
WILLIAM R. SWANSON
No. 6406
REGISTERED LICENSED SITE PROFESSIONAL

An LSP Opinion is not required for a Utility-Related Abatement Measure Notification.

An LSP Opinion is not required for a URAM Completion Statement if the URAM is limited to the excavation and/or handling of not more than 100 cubic yards of soil contaminated by Oil, or not more than 20 cubic yards of soil contaminated either by Hazardous Material or a mixture of Hazardous Material and Oil.

ORIGINAL

K. PERSON UNDERTAKING RAM OR URAM:

Name of Organization: Buckley and Mann, Inc.

Name of Contact: Richard Mann/Stephen Mann Title: Owners

Street: 14 Bush Road Land

City/Town: Norfolk State: MA ZIP Code: 02056-0000

Telephone: 617-828-0029 Ext: 3442 FAX: (optional)

☐ Check here if there has been a change in person undertaking the RAM or URAM.

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC-106

RELEASE & UTILITY-RELATED ABATEMENT MEASURE (RAM & URAM) TRANSMITTAL FORM

Pursuant to 310 CMR 40.0444 - 0446 and 310 CMR 40.0462 - 0465 (Subpart D)

Release Tracking Number: 3 - 173

L. RELATIONSHIP TO SITE OF PERSON UNDERTAKING RAM or URAM: (check one)

☑ RP or PRP Specify: ◉ Owner ○ Operator ○ Generator ○ Transporter Other RP or PRP: _____

☐ Fiduciary, Secured Lender or Municipality with Exempt Status (as defined by M.G.L. c. 21E, s. 2)

☐ Agency or Public Utility on a Right of Way (as defined by M.G.L. c. 21E, s. 5(j))

☐ Any Other Person Undertaking RAM or URAM Specify Relationship: _____

M. CERTIFICATION OF PERSON UNDERTAKING RAM OR URAM:

I, Richard Mann, attest under the pains and penalties of perjury (i) that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this transmittal form, (ii) that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained in this submittal is, to the best of my knowledge and belief, true, accurate and complete, and (iii) that I am fully authorized to make this attestation on behalf of the entity legally responsible for this submittal. I/the person or entity on whose behalf this submittal is made am/is aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information.

By: Richard D. Mann (signature) Title: PRESIDENT

For: Buckley and Mann, Inc. (print name of person or entity recorded in Section K) Date: 9/22/97

Enter address of person providing certification, if different from address recorded in Section K:

Street: N/A

City/Town: _____ State: _____ ZIP Code: _____

Telephone: _____ Ext.: _____ FAX: (optional) _____

YOU MUST COMPLETE ALL RELEVANT SECTIONS OF THIS FORM OR DEP MAY RETURN THE DOCUMENT AS INCOMPLETE. IF YOU SUBMIT AN INCOMPLETE FORM, YOU MAY BE PENALIZED FOR MISSING A REQUIRED DEADLINE.

COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENVIRONMENTAL AFFAIRS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
ONE WINTER STREET, BOSTON, MA 02108 617-292-5500

SCANNED

ARGEO PAUL CELLUCCI
Governor

TRUDY COXE
Secretary

DAVID B. STRUHS
Commissioner

RICHARD & STEPHEN MANN
BUCKLEY & MANN INC
14 BUSH POND LANE
NORFOLK,MA 02056-

SITE INFORMATION:
SITE NUMBER 3-0000173
BUCKLEY & MANN
17 LAWRENCE ST
NORFOLK

**** IMPORTANT COMPLIANCE INFORMATION - PLEASE READ IMMEDIATELY ****

May 28, 1998

Dear Sir or Madam:

The Department of Environmental Protection (DEP) will publish the 1998 List of Tier I Disposal Sites this Fall. This List identifies the highest priority (Tier I) sites in the Commonwealth where a release of oil or hazardous material has been reported to DEP, as well as "default Tier IB" sites where property owners or other parties have missed a significant assessment or cleanup deadline. DEP is publishing this list in accordance with Massachusetts General Law Chapter 21E, Section 3A(b) and the Massachusetts Contingency Plan ("MCP," 310 CMR 40.0000).

Our information indicates that you have a connection to the above-referenced site as a past or current landowner, facility owner or operator, generator or transporter of oil or hazardous material, or another type of connection. The above-referenced site will be included in the Tier I Site List as a default Tier IB site unless actions are taken to return this site to compliance. Designation as a default Tier IB site could result in increased compliance fees and DEP enforcement. **To avoid having this site included in the Tier I Site List and to avoid possible enforcement action, you must take appropriate actions (as described in Attachment 1) by July 31, 1998.**

For More Information: A copy of the MCP may be obtained from the Statehouse Bookstore in Boston by calling 617-727-2834 or in Springfield by calling 413-784-1376. If you have questions about the requirements applicable to the above-referenced site, please visit DEP's Web Site (www.state.ma.us/dep/bwsc) or call the MCP HelpLine: from area code 617 and outside Massachusetts, call 617- 338-2255; from all other Massachusetts area codes, call 800-462-0444.

Very truly yours,

Sarah Weinstein

Sarah Weinstein, Acting Deputy Assistant Commissioner
Bureau of Waste Site Cleanup

Commonwealth of Massachusetts
Executive Office of Environmental Affairs
Department of Environmental Protection

William F. Weld
Governor
Daniel S. Greenbaum
Commissioner

November 19, 1992

Re: #3-0173
BUCKLEY & MANN
17 LAWRENCE STREET
NORFOLK

Dear Waiver Recipient:

This letter concerns the referenced disposal site. M.G.L. c. 21E, Section 3A (d)(2) requires that the Department classify disposal sites as "priority" or "non-priority". The Department has reviewed the information available to it about the referenced disposal site, and has determined that it is a non-priority disposal site, pursuant to the Interim Site Classification requirements in the Massachusetts Contingency Plan, 310 CMR 40.544.

In addition, M.G.L. c. 21E, Section 14 (a) requires that, once a site has been classified, the Department publish a legal notice and press release informing the public of the location's status as a disposal site and its classification. The Department will issue a legal notice and press release containing this information on December 4, 1992, in the Country Gazette.

Effective October 3, 1988, the extent of assessment and remediation required by M.G.L. c. 21E at locations and disposal sites is determined by reference to the Massachusetts Contingency Plan [310 CMR 40.000 et seq., promulgated pursuant to M.G.L. c. 21E, Sections 3, 3A(m), and 6.].

For more information about the legal notice for the referenced disposal site, please contact Karen Stromberg at DEP's Northeast Region at (617) 935-2160.

Very truly yours,

Allexe Law-Flood,
Regional Planner

Sarah Weinstein,
Director,
Division of Planning
and Program Development,
Bureau of Waste Site Cleanup

LEGAL NOTICE

COMMONWEALTH OF MASSACHUSETTS

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Pursuant to M.G.L. c. 21E, Section 14(a) and the Massachusetts Contingency Plan (310 CMR 40.00), the Department of Environmental Protection announces that a Preliminary Assessment and/or Limited Site Investigation has been performed at the following location: #3-0173, BUCKLEY & MANN, 17 LAWRENCE STREET, NORFOLK, MA.

This investigation has confirmed that a release of oil and/or hazardous materials has occurred at this location. Therefore, the Department has identified it as a confirmed disposal site. The Department has also determined that this site is a non-priority disposal site (as defined by M.G.L. c. 21E, Section 2). M.G.L. c. 21E, Section 3A (f)(3) requires that, if feasible, permanent solutions be implemented at disposal sites. If a permanent solution is not feasible, then a temporary solution must be implemented, and a plan for achieving a permanent solution must be developed.

This site has also been granted a Waiver of Approvals by DEP. Waiver sites are non-priority disposal sites which have been granted a Waiver of Approvals by the Department, pursuant to 310 CMR 40.537. This waiver allows the person granted it to conduct remedial response actions at the disposal site without prior Department approval of these actions.

M.G.L. c. 21E and the Massachusetts Contingency Plan provide several opportunities for public notice of and involvement in decisions regarding response actions at disposal sites, including:

- The Chief Municipal Official and Board of Health of the community in which the site is located will be provided with notices of the results of investigations, plans for remedial responses, and field work involving the use of heavy construction equipment and/or protective clothing (310 CMR 40.202).

- Upon receipt of a petition from ten or more residents of the municipality in which the disposal site is located, or of a municipality potentially affected by a disposal site, a plan for involving the public in decisions regarding response actions at the site will be prepared and presented at a public meeting. This plan will be revised based on comments received, and will be implemented over the course of the response action (310 CMR 40.203).

For information on how to make an appointment to review the files and obtain more information on the confirmed disposal site referenced above, and the opportunities for public involvement during its remediation, please contact Karen Stromberg, DEP Northeast Regional Office, Site Assessment and Cleanup Section, 10 Commerce Way, Woburn, MA 01801 (Telephone: 617/935-2160).

Buckley & Mann, Inc.
14 Bush Pond Road
Norfolk, MA 02056

Department of Environmental Protection
Northeast Regional Office
10 Commerce Way
Woburn, MA 01801

Stacy
Warren

01801-1006 17

3-0173
NORFOLK
17 LAWRENCE S.

SCANNED

Messrs. Richard & Stephen Mann
Buckley & Mann, Inc.
14 Bush Pond Road
Norfolk, MA 02056

September 23, 1996

Department of Environmental Protection
Northeast Regional Office
10 Commerce Way
Woburn, MA 01801

Enclosed please find a 120 day Status Report for the Release Abatement Measure at the Buckley & Mann property in Norfolk, Massachusetts. The site is Bureau of Waste Site Cleanup #3-0173.

If you have any questions, please contact us at (617) 828-0029 X3442.

Richard D. Mann

Massachusetts Department of Environmental Protection **BWSC-106**
Bureau of Waste Site Cleanup

RELEASE & UTILITY-RELATED ABATEMENT MEASURE (RAM & URAM) TRANSMITTAL FORM

Pursuant to 310 CMR 40.0444 - 0446 and 310 CMR 40.0462 - 0465 (Subpart D)

Release Tracking Number: 3 - 0173

A. SITE LOCATION:

Site Name: (optional) Buckley and Mann, Inc.

Street: 17 Lawrence Street Location Aid: Bush Pond

City/Town: Norfolk, Massachusetts ZIP Code: 02056

☐ Check here if a Tier Classification Submittal has been provided to DEP for this Release Tracking Number.

Related Release Tracking Numbers That This RAM or URAM Addresses:

B. THIS FORM IS BEING USED TO: (check all that apply)

☐ Submit a **RAM Plan** (complete Sections A, B, C, D, E, F, J, K, L and M).

☐ Check here if this RAM Plan is an update or modification of a previously approved written RAM Plan. Date Submitted:

☒ Submit a **RAM Status Report** (complete Sections A, B, C, E, J, K, L and M).

☐ Submit a **RAM Completion Statement** (complete Sections A, B, C, D, E, G, J, K, L and M).

☐ Confirm or Provide **URAM Notification** (complete Sections A, B, H, K, L and M).

☐ Submit a **URAM Status Report** (complete Sections A, B, C, E, J, K, L and M).

☐ Submit a **URAM Completion Statement** (complete Sections A, B, C, D, E, I, J, K, L and M).

RECEIVED
SEP 30 1996
DEP/NORTHEAST REGION
WOBURN, MASS.

You must attach all supporting documentation required for each use of form indicated, including copies of any Legal Notices and Notices to Public Officials required by 310 CMR 40.1400.

C. SITE CONDITIONS:

☒ Check here if the source of the Release or Threat of Release is known.

If yes, check all sources that apply: ☐ UST ☐ Pipe/Hose/Line ☐ AST ☐ Drums ☐ Transformer ☐ Boat

☐ Tanker Truck ☐ Vehicle ☒ Other Specify: Building debris, coal ash and textile plant wastes

Identify Media and Receptors Affected: (check all that apply) ☐ Air ☐ Groundwater ☐ Surface Water ☐ Sediments ☒ Soil

☐ Wetlands ☐ Storm Drain ☐ Paved Surface ☐ Private Well ☐ Public Water Supply ☐ Zone 2 ☐ Residence

☐ School ☐ Unknown ☐ Other Specify:

Identify Release and/or Threat of Release Conditions at Site: (check all that apply)

☐ 2 and 72 Hour Reporting Condition(s) ☒ 120 Day Reporting Condition(s) ☐ Other Condition(s)

Describe: Metals, PAH and TPH from building debris, coal ash and textile plant wastes

RAMs may be conducted concurrently with an IRA only with written DEP approval
URAMs may not be conducted if any 2 or 72 Hour conditions exist at the site.

Identify Oils and Hazardous Materials Released: (check all that apply) ☐ Oils ☐ Chlorinated Solvents ☒ Heavy Metals

☒ Others Specify: PAH, TPH

D. DESCRIPTION OF RESPONSE ACTIONS: (check all that apply)

☐ Assessment and/or Monitoring Only

☐ Excavation of Contaminated Soils

☐ Re-use, Recycling or Treatment

○ On Site ○ Off Site Est. Vol.: _____ cubic yards

Describe: _____

☐ Store ○ On Site ○ Off Site Est. Vol.: _____ cubic yards

☐ Deployment of Absorbant or Containment Materials

☐ Temporary Covers or Caps

☐ Bioremediation

☐ Soil Vapor Extraction

☐ Structure Venting System

☐ Product or NAPL Recovery

SECTION D IS CONTINUED ON THE NEXT PAGE.

Massachusetts Department of Environmental Protection — BWSC-106
Bureau of Waste Site Cleanup

RELEASE & UTILITY-RELATED ABATEMENT MEASURE (RAM & URAM) TRANSMITTAL FORM

Pursuant to 310 CMR 40.0444 - 0446 and 310 CMR 40.0462 - 0465 (Subpart D)

Release Tracking Number: 3 - 0173

I. URAM COMPLETION STATEMENT:

☐ Check here if this URAM was limited to the excavation and/or handling of not more than 100 cubic yards of soil contaminated by Oil, or not more than 20 cubic yards of soil contaminated by either a Hazardous Material or a mixture of a Hazardous Material and Oil.

If any Remediation Waste will be stored, treated, managed, recycled or reused at the site following submission of the URAM Completion Statement, you must submit either a Release Abatement Measure (RAM) Plan or a Phase IV Remedy Implementation Plan, along with the appropriate transmittal form, as an attachment to the URAM Completion Statement.

J. LSP OPINION:

I attest under the pains and penalties of perjury that I have personally examined and am familiar with this transmittal form, including any and all documents accompanying this submittal. In my professional opinion and judgment based upon application of (i) the standard of care in 309 CMR 4.02(1), (ii) the applicable provisions of 309 CMR 4.02(2) and (3), and (iii) the provisions of 309 CMR 4.03(5), to the best of my knowledge, information and belief,

> *if Section B of this form indicates that a **Release Abatement Measure Plan** is being submitted*, the response action(s) that is (are) the subject of this submittal (i) has (have) been developed in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) complies(y) with the identified provisions of all orders, permits, and approvals identified in this submittal;

> *if Section B of this form indicates that a **Release Abatement Measure Status Report** or a **Utility-Related Abatement Measure Status Report** is being submitted*, the response action(s) that is (are) the subject of this submittal (i) is (are) being implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) complies(y) with the identified provisions of all orders, permits, and approvals identified in this submittal;

> *if Section B of this form indicates that a **Release Abatement Measure Completion Statement** or a **Utility-Related Abatement Measure Completion Statement** is being submitted*, the response action(s) that is (are) the subject of this submittal (i) has (have) been developed and implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) complies(y) with the identified provisions of all orders, permits, and approvals identified in this submittal;

I am aware that significant penalties may result, including, but not limited to, possible fines and imprisonment, if I submit information which I know to be false, inaccurate or materially incomplete.

☐ Check here if the Response Action(s) on which this opinion is based, if any, are (were) subject to any order(s), permit(s) and/or approval(s) issued by DEP or EPA. If the box is checked, you MUST attach a statement identifying the applicable provisions thereof.

LSP Name: William R. Swanson LSP #: 6406 Stamp:

Telephone: 617-252-8000 Ext.: 8458

FAX: (optional) 617-621-2565

Signature: William R. Swanson

Date: 9/20/96

COMMONWEALTH OF MASSACHUSETTS — WILLIAM R. SWANSON No. 6406 — REGISTERED LICENSED SITE PROFESSIONAL

An LSP Opinion is not required for a Utility-Related Abatement Measure Notification.

An LSP Opinion is not required for a URAM Completion Statement if the URAM is limited to the excavation and/or handling of not more than 100 cubic yards of soil contaminated by Oil, or not more than 20 cubic yards of soil contaminated either by Hazardous Material or a mixture of Hazardous Material and Oil.

K. PERSON UNDERTAKING RAM OR URAM:

Name of Organization: Buckley and Mann, Inc.

Name of Contact: Richard Mann/Stephen Mann Title: Owners

Street: 14 Bush Pond Lane

City/Town: Norfolk State: MA ZIP Code: 02056

Telephone: 617-828-0029 Ext.: X3427 SM X3442 RM FAX: (optional)

☐ Check here if there has been a change in person undertaking the RAM or URAM.

RELEASE ABATEMENT MEASURE (RAM) PLAN STATUS REPORT
for
BUCKLEY & MANN, INC., NORFOLK, MASSACHUSETTS

BUREAU OF WASTE SITE CLEAN-UP SITE NUMBER 3-0173

Prepared by

CAMP DRESSER & McKEE INC.
CAMBRIDGE, MASSACHUSETTS

September 20, 1996

Robert A. Dangel
Licensed Site Professional # 7798

William R. Swanson
Licensed Site Professional # 6406

RELEASE ABATEMENT MEASURE (RAM) PLAN STATUS REPORT
for
BUCKLEY & MANN, INC., NORFOLK, MASSACHUSETTS

BUREAU OF WASTE SITE CLEAN-UP SITE NUMBER 3-0173

1. Previous filing

The RAM Plan was filed on May 28, 1996.

2. Work since the last report

Plans and specifications have been prepared for excavation and removal of contaminated soil from Areas 3, 4, 5, 6, 7, 10 and 12.

3. Work planned

Bids will be solicited in October for excavation and removal of the contaminated soil, with field work planned for November 1996.

DEP BWSC RAO Technical Screening Audit Form

Disclaimer: **This checklist is for use by DEP in reviewing *Response Action Outcome (RAO)* Statements, and may not be relied upon for any other purpose. This checklist is not a comprehensive list of RAO requirements, which are fully set forth in MGL c. 21E and 310CMR 40.0000. Completion of this checklist by DEP does not constitute a final agency decision, and does not create any legal rights or relieve any party of obligations that exist pursuant to applicable laws.**

SCANNED

Lead RTN: 3-173		
SUBMITTAL TYPE (Circle one) RAO RAO-P LSP Eval. Opin. Waiver Compl. St. **RAO w/ AUL** Other: Related RTNs:	OHM description: (Source, Type of OHM, Media Affected) Historical use-former textile manuf. PAH,CR,PB,chlorinated solvents Soil, gw, sediment Site Use: Undeveloped-former industrial	Date RAO Rcvd 9 / 4 / 01

Town: Norfolk	Site Name: Buckley and Mann
Address: 17 Lawrence Street	
PRP/OP : Buckley and Mann, Inc.	LSP Name: Robert Dangel
Consultant: CDM	LSP No.: 7798

TECHNICAL SCREENING CHECKLIST

Condition				Page#
I. SITE CONCERNS (Based upon conditions at time of RAO submittal)	**Yes**	**No**	**?**	
A. Time Critical Conditions (Check all that apply)				
1. ☐ > Applicable GW-2 standard @ residence/school with no soil gas/indoor air sampling		X		
2. ☐ >0.5" NAPL observed in any monitoring well		X		
3. ☐ One or more data points > UCL		X		
4. ☐ EPC in S-1 soil > Method 1 standard and school/residence within 500 feet		X		
5. ☐ Site contaminants present in indoor air		X		
B. Drinking Water (Check all that apply)	**Yes**	**No**	**?**	
1. Site within potential drinking water source area (PDWSA)				
2. Site located within IWPA/mapped Zone II	X			
3. Private/Non- municipal public well(s) located within 500 feet of site				
4. Municipal well(s) located within 1000 feet of site				
5. ☐ Contaminated private well confirmed with same contaminant-type as source/release				
6. ☐ Contaminated public water supply confirmed as a result of site				
C Contaminated Soil (Check all that apply)	**Yes**	**No**	**?**	
1. Category S-3 Soils				
2. Category S-2 Soils				
3. Category S-1 Soils	X			
D. Site/Area Use (Check all that apply)	**Yes**	**No**	**?**	
1. Industrial (no children likely to be present)				
2. Commercial (limited presence of children)				
3. School/Institution				
4. Residential	X			
E. Contaminant Type(s) *(Check all that apply)*	**Yes**	**No**	**?**	
1. Petroleum Fuel Oils				
2. Gasoline, lube oils, waste oils and other petroleum products				
3. Metals, coal tar, PCBs, pesticides/herbicides, asbestos	X			
4. Chlorinated Solvents or Other	X			
F. Environmental Concerns (Check all that apply)	**Yes**	**No**	**?**	
1. Site within 500 feet of surface water and/or wetlands	X			
2. Endangered species habitat, ACEC and/or certified vernal pool within 500 feet				
3. Confirmed contamination of surface water, sediments and/or wetlands with site contaminants	X			
G. Site Complexity (Check all that apply)	**Yes**	**No**	**?**	
1. Media other than groundwater or soil affected (surface water, air, sediment)	X			
2. Co-mingled plumes (i.e., different sources from one or more sites co-mingled)				
3. Bedrock contamination			X	
If ☐ conditions currently exist, see supervisor to discuss.				

DEP BWSC RAO Technical Screening Audit Form

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II. TECHNICAL ADEQUACY	Citation(s)	Yes	No	?	NA	Page #
A. Remedial Response Actions – Indication That: (Check all that apply)						
1. Documentation of removal of remediation waste provided	40.0033 (5), (6)					
2. Remediation waste properly managed (reqmnts -Air 95%,gw, sw [NPDES], soil properly handled)	40.0031-40.0049			X		
3. Obtained DEP or other agency approvals and work done in accordance with approvals	40.0100(4), 40.0170(2-3, 5)					
B. Source/Extent Investigations – Indication That: (Check all that apply)						
1. History of OHM use/storage/disposal at the site included	40.0405(1), 40.0833, 40.0923(1)	X				
2. Potential source(s) identified, characterized, or abated (septic leach field, floor drain, AST, etc.)	40.0923(2)			X		
3. Extent of contamination defined (including downgradient)	40.0904(2)(a)			X		
4. Potential or actual OHM analyzed for and/or evaluated (metals, VPH, VOCs, etc.)	40.0926(1)			X		
5. All likely migration pathways (soil/gw/sw/air/sediment) identified/characterized/evaluated	40.0904(2)(c)		X			
6. Proper sample collection technique/preservation/analysis/data reporting	40.0017	X				
C. Risk Characterization – Indication That: (Check all that apply)						
1. Background identified or characterized	40.0904(2)(b)	X				
2. Soil/groundwater category properly identified	40.0930	X				
3. EPC calculation provided (spatial or temporal) and EPC properly calculated	40.0926		X			
4. Hot Spot(s) addressed, identified (as Hot Spot) and not added in to other EPCs	40.0924(2)	X				
5. Migration Pathways (air, groundwater, etc.) assessed and evaluated in RC (All Methods, media dependent)	40.0904(2)(c)	X				
6. Applicable soil and/or groundwater standards not exceeded (Method 1 or 2) or AUL applied	40.0974, 40.0975	X				
7. Correct risk characterization method used	40.0941, 40.0942			X		
8. AUL Permitted/Inconsistent Activities, etc. understandable to general public and clearly written	40.0923(4)					
9. All receptors accounted for (construction worker, trespassers, wetland, etc.) (Method 3)	40.0920-40.0922					
10. Proper Exposure Scenario assumptions (exposure period, etc.) (Method 3)	40.0923-40.0925					
11. All Exposure Pathways (dermal, inhalation, etc.) presented (Method 3)	40.0925					
12. Final RAO for facility/property submitted with total site risk calculated (Method 3)	40.0993(7)					
III. Response Action Outcome Statement (RAO) Indication That: (Check all that apply)						
1. RAO boundaries defined/delineated (clear description/plan of RAO boundaries)	40.1003(4), 40.1056(2)(a)	X				
2. Relationship of RAO to other RAOs for that location has been defined	40.1056(1)(d)	X				
3. Correct RAO category	40.1030 – 40.1050	X				
4. Indication as to whether OHM(s) exceed UCLs presented	40.1056(1)(i)	X				
A. CLASS A – Indication That: (Check all that apply)						
1. All uncontrolled sources have been eliminated or controlled	40.1035 (2)(b)			X		
2. Groundwater concentrations do *not* exceed standards in GW-1 area	40.1036(5)(b)	X				
3. Phase IV, Phase V or Post RAO O&M, where required, has been completed	40.1036(6)	X				
A-1. CLASS A-1 – Indication That: (Check all that apply)						
1. A permanent solution has been achieved	40.1036(1)(a)					
2. The level of OHM at the site has been reduced to background	40.1036(1)(a)					
3. Response actions eliminated all threats of release and a release oil and/or hazardous material to the environment has *not* occurred	40.1036(1)(b)					
A-2. CLASS A-2 – Indication That: (Check all that apply)						
1. A permanent solution has been achieved	40.1036(2)(a)					
2. A background feasibility evaluation has been conducted which demonstrates that achievement of background is not feasible	40.1020(3), 40.1056(2)(e)					

DEP BWSC RAO Technical Screening Audit Form

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A-3. CLASS A-3 – Indication That: (Check all that apply)		Yes	No	?	NA	Page #
1. A permanent solution has been achieved	40.1036(3)(a)	X				
2. Obligations and Conditions of AUL have been implemented	40.1036(3)(c), 40.1056(2)(g)			X		
3. Reasonable AUL restrictions to maintain No Significant Risk (deep OHM, long exposure period, etc)	40.1074(2)(d-f, h)		X			
4. A background feasibility evaluation has been conducted which demonstrates that achievement of background is not feasible	40.1020(3), 40.1056 (2)(e)	X				
5. Groundwater or Soil OHM concentrations do *not* exceed UCLs	40.1036(3)(d)	X				
A-4. CLASS A-4 – Indication That: (Check all that apply)						
1. A permanent solution has been achieved	40.1036(4)(a)					
2. Obligations and Conditions of AUL have been implemented	40.1036 (4)(c), 40.1056(2)(g)					
3. Reasonable AUL restrictions to maintain No Significant Risk (deep OHM, long exposure period, etc)	40.1074(2)(d-f, h)					
4. Groundwater or Soil concentrations exceed UCLs; however: (check only a, b, or c)	40.1036 (4)(d), 40.1036(5)(a)	---	---	---	---	
a. concentrations are consistent with background	40.1036(5)(a)					
b. contaminated soil is *greater* than 15 feet below grade	40.1036 (4)(d), 40.1036(5)(a)					
c. contaminated soil is beneath an engineered barrier	40.1036 (4)(d), 40.1036(5)(a)					
5. Engineered barrier does compare favorably to all other alternatives	40.0859(4), 40.1036(4)(e)					
6. UCL Feasibility Evaluation conducted and shows that achieving UCLs is not feasible	40.1036(4)(e), 40.1056(2)(f)					
B. CLASS B – Indication That: (Check all that apply)						
1. Remedial actions have *not* been conducted	40.1045(2)					
2. A level of No Significant Risk does exist	40.1045(1)					
3. Initial Assessment, Phase I, or Phase II has been completed	40.1046(5)					
B-1. CLASS B-1 – Indication That:						
1. One or more AULs are *not* necessary to maintain a level of no significant risk	40.1046(1)					
B-2. CLASS B-2 – Indication That: (Check all that apply)						
1. Obligations and Conditions of AUL have been implemented	40.1046(2)(a), 40.1056(2)(g)					
2. Reasonable AUL restrictions to maintain No Significant Risk (deep OHM, long exposure period, etc)	40.1074(2)(d-f, h)					
3. Groundwater or Soil OHM concentrations do *not* exceed UCLs	40.1046(2)(b)					
B-3. CLASS B-3 – Indication That: (Check all that apply)						
1. Obligations and Conditions of AUL have been implemented	40.1046(3)(a), 40.1056(2)(g)					
2. Reasonable AUL restrictions to maintain No Significant Risk (deep OHM, long exposure period, etc)	40.1074(2)(d-f, h)					
3. OHM concentrations exceed UCLs; however: (check only a or b)	40.1046(3)(b),(c)	---	---	---	---	
a. soil is located *greater* than 15 feet from ground surface	40.1046(3)(b)					
b. UCL Feasibility Evaluation was conducted and shows that achieving UCLs is not feasible	40.1046(3)(c)					
C. CLASS C – Indication That: (Check all that apply)						
1. All substantial hazards have been eliminated	40.1050(1), 40.1056(2)(d)					
2. Soil and/or groundwater concentrations exceed any applicable standards	40.1050(2)(b)					
3. Phase II and Phase III were submitted	40.1050(3), 40.1050(4)(a)					
4. Plan of definitive & enterprising steps to achieve a permanent solution is included	40.1050(5)(a), 40.1056(2)(j)					
5. Statement indicating whether post RAO Active O&M will be conducted is included	40.1056(1)(e)					
6. Plan for post-RAO active O&M is included	40.1056(2)(l)					

KTN 3-173
17 Lawrence St
Norfolk

All addresses two specific areas on-site.

11/10/02

AUL COMPLIANCE ASSISTANCE CHECKLIST

Checklist for Notice of Activity and Use Limitation -- MCP as amended through October 29, 1999 -- Form 1075

- NOTE: This checklist is intended to assist parties in preparing and implementing Notices of Activity and Use Limitation (AULs) on Form 1075. For ease of reference in using this checklist, each paragraph of the attached Form 1075 has been labeled or numbered. This checklist is intended solely as guidance, and is not a substitute for the regulations. Parties implementing AULs should carefully consult 310 CMR 40.0000 (the MCP), for general and specific regulatory requirements for AULs.

REQUIREMENTS FOR COMPLETING FORM 1075					Reference(s) to MCP, Form	Notes
1.	**Is the current version of the Form 1075 being used? (Must be current at the time of recording)**	(Y)	N		40.1074(1)(a)	
2.	**Is the Form's boilerplate unaltered, except where alterations are allowed through bracketed language?**	Y	(N)		40.1074(1)(a)	
3.	Is the AUL a Confirmatory Notice of Activity and Use Limitation?	Y	N		40.1085	
4.	Is the word "Confirmatory" appropriately included or omitted in the following locations, to indicate whether the AUL is a Confirmatory Notice of Activity and Use Limitation? ___ Header ___ Paragraph 1 ___ Paragraph 15 ___ Paragraph 19	Y	N		Form 1075	
5.	Is optional Paragraph 16 appropriately included or omitted, to indicate whether the AUL is a Confirmatory Notice of Activity and Use Limitation?	Y	N		Form 1075	
6.	If the AUL is a Confirmatory Notice of Activity and Use Limitation, does Paragraph 16 identify the date, Registry, book and page number of the original AUL?	Y	N		Form 1075	
7.	If the AUL is a Confirmatory Notice of Activity and Use Limitation, are the errors in the original AUL listed in Paragraph 16?	Y	N		Form 1075	
8.	Is the Disposal Site name identified in the Header of Form 1075?	Y	N		40.1074(2)(d)	
9.	Is the DEP Release Tracking Number(s) identified in the Header of Form 1075?	Y	N		40.1074(2)(d)	
10.	Does the Form identify, in Paragraph 1, the date on which the AUL was signed by the property owner(s)?	Y	N		Form 1075	
11.	**Is(are) the name(s) of the property owner(s) identified, in the following locations?** √ Paragraph 1 √ Paragraph 2 * Paragraph 21 (this paragraph may reference the property owner or an authorized representative)	Y	N		40.1074(2)(b)	Not clear if representative is authorized
12.	Is(are) the name(s) of property owner(s) consistent in all locations?	Y	N			
13.	If property owner(s) is(are) a corporation(s), is(are) the state(s) of incorporation identified in Paragraph 1?	Y	N	Not applicable (property owner(s) not a corporation)		
14.	Is(are) the address(es) of the property owner(s) identified in Paragraph 1?	Y	N		Form 1075	

15.	Does the Form indicate, through use of bracketed language in Paragraph 2, whether land is vacant or improved?	Y	N		Form 1075	
16.	**Is the address of the Property subject to the AUL identified (City/Town & County) in Paragraph 2?**	(Y)	N		40.1074(2)(a)1	
17.	In Paragraph 2, does the Form identify the owner's source of title (i.e. deed, certificate of title, probate docket number)?	Y	N		Form 1075	
18.	In Paragraph 3, is reference made to a survey plan of the Property? (Indicate the form of reference below) ___ Registry of Deeds, Plan Book & Plan Number (if Property is unregistered land) ___ Land Court Plan Number (if Property is registered land)	Y	N		40.1074(2)(a)3	
19.	**Is it clear that the AUL applies to the entire Property, or only to a Portion of the Property? ___ entire Property ✓ Portion of the Property**	(Y)	N		40.1074(2)(a)1	
20.	Is optional Paragraph 4 properly included or omitted, to indicate whether the AUL applies to the entire Property or only to a Portion of the Property?	Y	N		Form 1075	
21.	Is bracketed language selected in the following locations, indicating whether the AUL applies to the entire Property or only to a Portion of the Property (check all that apply)? ___ Paragraph 5 (twice) ___ Paragraph 6 ___ Paragraph 8 ___ Paragraph 9 ___ Paragraph 10 ___ Paragraph 11 ___ Paragraph 13	Y	N		Form 1075	
22.	Is bracketed language indicating Property or Portion of Property consistent in all locations?	Y	N			
23.	**If only a Portion of the Property is subject to the AUL: Is reference made in Paragraph 4 to a survey plan of the Portion of the Property subject to the AUL? (If yes, indicate the form of reference below)** **___ Registry of Deeds, Plan Book & Plan Number (if Property is unregistered land)** **✓ Sketch Plan "attached hereto and filed herewith for registration" (if Property is registered land)**	(Y)	N	Not applicable (entire Property is subject to AUL)	40.1074(2)(a)4.	
24.	Is it clear that the area subject to the AUL comprises the entire Disposal Site, or only a Portion of the Disposal Site? ___ entire Disposal Site ___ Portion of Disposal Site	Y	N		Form 1075	
25.	Is bracketed language selected in the following locations, indicating whether the area subject to the AUL comprises the entire Disposal Site or only a portion of the Disposal Site? ___ Paragraph 5 ___ Paragraph 6	Y	N		Form 1075	
26.	Is bracketed language indicating entire Disposal Site/Portion of Disposal Site consistent in all locations?	Y	N			
27.	**In Paragraph 5, is reference made to a sketch plan, attached as Exhibit B, showing the relationship of the Disposal Site to the Property or Portion of Property subject to the AUL?**	(Y)	N		40.1074(2)(a)5	
28.	Does the Form include, in Paragraph 6, the date of the Activity and Use Limitation Opinion (AUL Opinion)?	Y	N		Form 1075	

29.	Is the purpose of the AUL to maintain a condition of NSR, or to maintain a condition of NSH?	NSR		NSH	Form 1075	
30.	Is bracketed language selected in the following locations, indicating whether the purpose of the AUL is to maintain a condition of No Significant Risk (NSR), or to maintain a condition of No Substantial Hazard (NSH)? ___ Paragraph 8 ___ Paragraph 10 ___ Paragraph 11	Y	N		Form 1075	
31.	Is language indicating NSR or NSH consistent in all locations?	Y	N		Form 1075	
32.	**In Paragraph 8, does the Form include a description of permitted activities and uses (i.e., consistent with AUL Opinion)?**	(Y)	N		40.1074(2)(e)	
33.	**Is the description of permitted activities and uses written in a clear and understandable manner?**	(Y)	N		40.1074(2)(e)	
34.	**In Paragraph 9, does the Form include a description of inconsistent activities and uses?**	(Y)	N		40.1074(2)(g)	
35.	**If yes, is the description of inconsistent activities and uses written in a clear and understandable manner?**	(Y)	N	Not applicable	40.1074(2)(g)	
36.	**In Paragraph 10, does the Form include a description of obligations and conditions?**	(Y)	N		40.1074(2)(f)	
37.	**If yes, is the description of obligations and conditions written in a clear and understandable manner?**	(Y)	N	Not applicable	40.1074(2)(f)	
38.	**Is the Form signed by the property owner(s) in Paragraph 17?**	(Y)	N		40.1074(2)(j)	
39.	Is(are) the property owner(s)'s signature authorized and binding? (Check one of the options below) ___ Sole ownership: signed by sole owner ___ Joint ownership: signed by all owners ___ Trust: Signed in accordance with requirements established by the trust document ___ Corporation: Certificate of incumbency AND (Check one) ___ Signed by President and Treasurer ___ Signed by President and Assistant Treasurer ___ Signed by Vice President and Treasurer ___ Signed by Vice President and Assistant Treasurer ___ Signed by other officer(s) authorized by vote of the Board of Directors, with vote authorizing said officer(s) attached to Form ___ Other (explain): _____	Y	N		40.1074(2)(j)	
40.	Is(are) the property owner(s)'s signature dated in Paragraph 17?	Y	N		Form 1075	

41.	Is(are) the property owner(s)'s signature(s) properly notarized (i.e., are each of the following requirements met) in Paragraph 18? ___ All signatures are notarized ___ State and county of notary are identified ___ Property owner(s) is/are named in notary block ___ Notary signature is present ___ Notary signature is dated ___ Commission expiration date is identified ___ Commission is not expired at time of notarization ___ Notary seal or stamp is included (required for out-of-state notary; not required for Massachusetts notary)	Y	N		40.1074(2)(j)	
42.	**Is the Form signed by an LSP in Paragraph 19?**	Y	N		40.1074(2)(j)	
43.	Is the LSP's signature dated in Paragraph 19?	Y	N		40.0015(1)	
44.	Is the LSP's signature dated on or after (not before) the date of owner's signature? Date of LSP's signature_____ Date of Owner's signature_____	Y	N			
45.	Is LSP's signature sealed with LSP stamp?	Y	N		40.1074(2)(j)	
46.	Is the LSP's signature properly notarized (i.e., are each of the following requirements met) in Paragraph 20? ___ State and county of notary are identified ___ LSP is named in notary block ___ Notary signature is present ___ Notary signature is dated ___ Commission expiration date is identified ___ Commission is not expired at time of notarization ___ Notary seal or stamp is included (required for out-of-state notary; not required for Massachusetts notary)	Y	N		40.1074(2)(j)	
REQUIRED ATTACHMENTS TO FORM 1075						
	EXHIBITS A, A-1; A-2				Reference(s)	Notes
47.	**Is a legal description of the Property subject to the AUL (either a running description or a bounding description) attached as Exhibit A? (Check one):** **___ Running (metes & bounds) description (if Property is unregistered land)** **___ Bounding description (if Property is registered land)**	Y	N		40.1074(2)(a)2	
48.	**If only a Portion of the Property is subject to the AUL, is a legal description of that Portion (running description) attached as Exhibit A-1?**	Y	N	Not applicable (entire Property subject to AUL)	40.1074(2)(a)4	
49.	**If Property is registered and only a Portion of the Property is subject to the AUL, is an 8.5" x 11" survey plan of the restricted Portion attached as Exhibit A-2?**	Y	N	Not applicable (entire Property is subject to AUL, or is unregistered)	40.1074(2)(a) 4.a	

50.	**If the Property is registered, and only a Portion of the Property is subject to the AUL, does the description of the Portion subject to the AUL (Exhibit A-1) conform to the survey plan (Exhibit A-2)?**	Y	N	Not applicable (entire Property is subject to AUL, or is unregistered)		
	EXHIBIT B				Reference(s)	Notes
51.	**Is a sketch plan attached as Exhibit B?**	Y	N		40.1074(2)(a)5	
52.	**Does the sketch plan clearly illustrate the relationship of the area subject to the AUL to the boundaries of the Disposal Site?**	Y	N		40.1074(2)(a)5	
53.	Is the sketch plan consistent with the Form (e.g. if the Form indicates that only a Portion of the Property is restricted, does the sketch plan conform)?	Y	N			
	EXHIBIT C				Reference(s)	Notes
54.	**Is the Activity and Use Limitation Opinion (AUL Opinion), in narrative form, attached as Exhibit C?**	Y	N		40.1074(1)(b)	
55.	Is the AUL Opinion signed by the LSP?	Y	N		40.0015(1)	
56.	Is the LSP's signature dated?	Y	N		40.0015(1)	
57.	Is the LSP's seal included?	Y	N		40.0015(1)	
	EXHIBIT D				Reference(s)	Notes
58.	Is Transmittal Form 114 attached as Exhibit D?	Y	N		40.1074(1)(b)	
59.	Is the following information about the Disposal Site included? ___Release Tracking Number ___Disposal Site name ___Disposal Site address	Y	N		BWSC Form 114	
60.	Is the address of the Property subject to AUL identified, if different than the address of the Disposal Site?	Y	N	Not applicable (same address)	BWSC Form 114	
61.	Is a box checked to indicate what Form the AUL Opinion supports?	Y	N		BWSC Form 114	
62.	Is the following information about the LSP included? ___Name ___License number ___Telephone number ___Fax number (if applicable)	Y	N		BWSC Form 114	
63.	Is Transmittal Form 114 signed, dated and sealed by the LSP?	Y	N		BWSC Form 114	
64.	If Transmittal Form 114 indicates that a response action on which the AUL Opinion is based is subject to an EPA or DEP permit, order, or approval, is a statement describing the provisions thereof attached to the Transmittal Form?	Y	N	Not applicable (not subject to EPA or DEP permit, order or approval)	BWSC Form 114	
	SIGNATORY AUTHORITY				Reference(s)	Notes
65.	If the person signing the AUL is not an individual signing on his/her own behalf, is there documentation of the person's signatory authority attached as an exhibit to the AUL?	Y	N	Not applicable (individual(s) signing on his/her/their own behalf)	40.1074(2)(c)	

CONSISTENCY OF FORMS & ATTACHMENTS						Reference(s)	Notes
66.	**Do the consistent activities and uses in the Form (Paragraph 8) match those permitted in the AUL Opinion (Exhibit C)?**	(Y)	N				
67.	**Do the inconsistent activities and uses in the Form (Paragraph 9) match those in the AUL Opinion (Exhibit C)?**	(Y)	N				
68.	**Do the conditions and obligations in the Form (Paragraph 10) match those in the AUL Opinion (Exhibit C)?**	(Y)	N				
69.	**Are the Form's descriptions of consistent (permitted) activities and uses, inconsistent activities and uses, and obligations and conditions consistent with each other?**	(Y)	N				
70.	Does the date of the AUL Opinion (Exhibit C) match the AUL Opinion date listed in the Form (Paragraph 6)?	Y	N				
71.	Does the date of the AUL Document (Paragraph 1) match the date of the Owner's signature in the signature block (Paragraph 17)?	Y	N				
72.	If the land is unregistered, does the legal description of the Property containing the area subject to the AUL (Exhibit A) conform to the survey plan of the Property?	Y	N	Not applicable (Property is registered land)			
73.	If the land is registered, does the legal description of the Property containing the area subject to the AUL (Exhibit A) conform to the Land Court Plan of the Property?	Y	N	Not applicable (Property is unregistered land)			
74.	If land is unregistered and only a portion of the Property is subject to the AUL, does the legal description of the Portion of the Property (Exhibit A-1) conform to the survey plan of the Portion?	Y	N	Not applicable (entire Property is subject to AUL, or Property is registered land)			
NOTIFICATION OF RECORD INTEREST HOLDERS						Reference(s)	Notes
75.	**At least 45 days prior to recording and/or registration of the AUL, were all current record interest holders, if any, notified, by certified mail, return receipt requested, of the existence and location of oil and/or hazardous material within the AUL area, and the terms of the proposed AUL(or did such holders waive the 45 day prior notification)?**	Y	N	No record interest holders		40.1074(1)(e)	?
REQUIREMENTS FOR RECORDING/REGISTERING FORM 1075						Reference(s)	Notes
76.	Record the AUL at the Registry of Deeds and/or register at the Land Registration Office.	Y	N			40.1074(3)	
77.	If the land is unregistered: have the AUL marginally referenced on the deed into the Owner of the Property.	Y	N	Not applicable (Property is registered land)		40.1074(3)	
78.	If land is unregistered: record a survey plan of the Property containing the area subject to the AUL as a Plan with the Registry of Deeds prior to or with the recording of the AUL.	Y	N	Not applicable (Property is registered land)		40.1074(2)(a)3	

79.	If land is unregistered and only a Portion of the Property is subject to the AUL: ecord a survey plan of the Portion of the Property as a Plan with the Registry of Deeds prior to or with the recording of the AUL.	Y	N	Not applicable (entire Property is subject to AUL, or is registered land)	40.1074(2)(a) 4.b	
PUBLIC NOTICE REQUIREMENTS					Reference(s)	Notes
80.	**Forward a copy of the Form to each of the local officials listed below within 30 days of being recorded or registered:** **___ Chief Municipal Officer** **___ Board of Health** **___ Zoning Official** **___ Building Code Enforcement Official**	Y	N		40.1403(7)(a)	No documentatio
81.	**Publish a notice of the AUL in a local newspaper within 30 days of the AUL being recorded or registered, identifying the following:** **___ The name, complete address, and RTN of the Disposal Site** **___ The type of Activity and Use Limitation (i.e., Notice of Activity and Use Limitation)** **___ Information about where the AUL and site file can be reviewed** **___ The name, address and phone number of the person(s) recording the AUL**	Y	N		40.1403(7)(b)	No documentatn
REQUIREMENTS FOR PREPARING NOTICE OF AUL – TRANSMITTAL FORM 113					Reference(s)	Notes
82.	Is the following information about the Disposal Site included? ___Release Tracking Number ___Disposal Site name ___Disposal Site address	Y	N		BWSC Form 113	
83.	Is the address of the Property subject to AUL identified, if different from the address of the Disposal Site?	Y	N	Not applicable (addresses of Property and Disposal Site are the same)	BWSC Form 113	
84.	Is a box checked to indicate what Form is being submitted?	Y	N		BWSC Form 113	
85.	Is the following information about the recording of the AUL included? ___Date AUL was recorded or registered ___Registry or Land Registration Office where AUL was recorded or registered ___One of the following: ___Instrument Number (unregistered land only) ___Book and Page Number (unregistered land only) ___Land Court Document Number (registered land only)	Y	N		BWSC Form 113	
86.	Is the following information about the person/organization submitting the Transmittal Form included? ___Name of person/organization ___Contact person (if Transmittal Form 113 is submitted by an organization) ___Address ___Telephone number ___Fax number (if applicable)	Y	N		BWSC Form 113	

87.	Is the following information about the property owner(s) included, if property owner is different from person/organization submitting Transmittal Form? ___Name(s) ___Addresses(s) ___Telephone number(s) ___Fax number(s) (if applicable)	Y	N	Not applicable (Transmittal Form 113 submitted by property owner(s))	BWSC Form 113	
88.	Is a box checked indicating the relationship of the person submitting Transmittal Form 113 to the Disposal Site?	Y	N		BWSC Form 113	
89.	Is the Transmittal Form signed, dated and certified by person submitting Transmittal Form?	Y	N		BWSC Form 113	
90.	Is the signature dated on or after (not before) the date the AUL was recorded or registered?	Y	N		BWSC Form 113	
91.	Is the following information about the person providing certification included, if not already provided earlier in the Transmittal Form? ___Name ___Addresses ___Telephone number ___Fax number (if applicable)	Y	N	Not applicable (information already provided)	BWSC Form 113	
SUBMITTAL OF AUL DOCUMENTATION TO DEP					Reference(s)	Notes
92.	**Within 30 days of recording and/or registering the AUL, send DEP a certified copy of the AUL with proof of recording/registration (i.e., Is Registrar's stamp on the document, indicating it is certified?) If yes, check one of the options below:** **___ AUL marked with a Registry stamp indicating an Instrument Number (if Property is unregistered land and Book and Page Number have not yet been assigned)** **___ AUL marked with a Registry stamp indicating a Book and Page Number (if Property is unregistered land and Book and Page Number have been assigned)** **✓ AUL marked with a Land Registration stamp indicating a Land Registration Document Number (if Property is registered land)**	Y	N		40.1074(4)(a)	
93.	Within 30 days of recording and/or registering the AUL, send DEP a registry copy of the required survey plan(s) referenced in the AUL, bearing the plan book and plan numbers.	Y	N		40.1074(4)(b)	
94.	If the property subject to the AUL is unregistered land, has DEP been sent a registry copy of the deed into the owner, bearing the marginal reference to the AUL, within 30 days of recording the AUL?	Y	N	Not applicable (property is registered land)	40.1074(4)(c)	
95.	Send DEP a statement from the person(s) signing the AUL certifying that the person(s) or entity(ies) identified as the owner(s) on the AUL owned the Property at the time the AUL was recorded and/or registered.	Y	N		40.1074(1)(f)1	
96.	Send DEP a statement from the person(s) signing the AUL certifying that record interest holders were notified pursuant to 40.1074(1)(e), or that there are no such holders.	Y	N		40.1074(1)(f)2	

Norfolk
17 Lawrence ST
3-173
U/A

CDM Camp Dresser & McKee Inc.

consulting
engineering
construction
operations

One Cambridge Place
50 Hampshire Street
Cambridge, Massachusetts 02139
Tel: 617 452-6000 Fax: 617 452-8000

SCANNED

August 31, 2001

Department of Environmental Protection
Bureau of Waste Site Cleanup
Northeast Regional Office
205A Lowell Street
Wilmington, MA 01887

Subject: Buckley & Mann Inc., Bureau of Waste Site Cleanup #3-0173

On behalf of Buckley & Mann, Inc., Camp Dresser & McKee Inc. is pleased to submit the enclosed bound report for the subject site. The Class A-3 Response Action Outcome and Release Abatement completion report includes original-signature copies of Forms BWSC-104, BWSC-106 and BWSC-113 and a Land Court certified copy of Form BWSC-114.

Attached with this letter is a copy of the transmittal to the Town of Norfolk offices.

If you have any questions, please contact me at (617) 452-6267.

Very truly yours,

CAMP DRESSER & McKEE INC.

Robert A. Dangel
Licensed Site Professional

cc: Richard & Stephen Mann

CDM Camp Dresser & McKee Inc.

consulting
engineering
construction
operations

One Cambridge Place
50 Hampshire Street
Cambridge, Massachusetts 02139
Tel: 617 452-6000 Fax: 617 452-8000

August 31, 2001

Town of Norfolk
Conservation Commission
Town Hall
Norfolk, MA 02056

Subject: Buckley & Mann Inc., Bureau of Waste Site Cleanup #3-0173

Enclosed are two bound copies of the Response Action Outcome report completed under the Massachusetts Contingency Plan for the subject site. The report includes documentation for the Class A-3 Response Action Outcome, completion of the Release Abatement Measure, and the Activity and Use Limitation.

The RAO report represents the completion of work under the Norfolk Conservation Commission Order of Conditions 240-191. Buckley and Mann Inc. hereby requests a Certificate of Compliance for the project. Please respond to:

Messrs. Richard and Stephen Mann
Buckley & Mann, Inc.
11 Northwood Drive
Walpole, Massachusetts 02081

with a copy to:

Robert A. Dangel
Camp Dresser & McKee Inc.
50 Hampshire Street
Cambridge, MA 02139

Copies of the Activity and Use Limitation have been submitted to the Board of Selectmen, the Board of Health, the Planning Board and the Building Commissioner/Zoning Officer. These departments may refer to the Conservation Commission for the complete Response Action Outcome report.

If you have any questions, please contact me at (617) 452-6267.

Very truly yours,

CAMP DRESSER & McKEE INC.

Robert A. Dangel
Licensed Site Professional

cc: With AUL: Norfolk Board of Selectman, Board of Health, Planning Board, Building Commissioner/Zoning Officer
With complete reports: Richard & Stephen Mann

Massachusetts Department of Environmental Protection **BWSC-104**
Bureau of Waste Site Cleanup

RESPONSE ACTION OUTCOME (RAO) STATEMENT & DOWNGRADIENT PROPERTY STATUS TRANSMITTAL FORM

Pursuant to 310 CMR 40.0180 (Subpart B), 40.0580 (Subpart E) & 40.1056 (Subpart J)

Release Tracking Number: 3 - 0173

A. SITE OR DOWNGRADIENT PROPERTY LOCATION:

Site Name: (optional) Buckley and Mann, Inc.

Street: 17 Lawrence Street Location Aid: Bush Pond

City/Town: Norfolk ZIP Code: 02056-0000

☑ Check here if this Site location is Tier Classified.

If a Tier I Permit has been issued, state the Permit Number:

Related Release Tracking Numbers that this Form Addresses:

If submitting an RAO Statement, you must document the location of the Site or the location and boundaries of the Disposal Site subject to this Statement. If submitting an RAO Statement for a PORTION of a Disposal Site, you must document the location and boundaries for both the portion subject to this submittal and, to the extent defined, the entire Disposal Site. If submitting a Downgradient Property Status Submittal, you must provide a site plan of the property subject to the submittal and, to the extent defined, the Disposal Site.

B. THIS FORM IS BEING USED TO: (check all that apply)

☑ Submit a **Response Action Outcome (RAO) Statement** (complete Sections A, B, C, D, E, F, H, I, J and L).

☐ Check here if this is a revised RAO Statement. Date of Prior Submittal:

☐ Check here if any Response Actions remain to be taken to address conditions associated with any of the Releases whose Release Tracking Numbers are listed above. This RAO Statement will record only an RAO-Partial Statement for those Release Tracking Numbers.

Specify Affected Release Tracking Numbers:

☐ Submit an optional **Phase I Completion Statement supporting an RAO Statement or Downgradient Property Status Submittal** (complete Sections A, B, H, I, J, and L).

☐ Submit a **Downgradient Property Status Submittal** (complete Sections A, B, G, H, I, J and K).

☐ Check here if this is a revised Downgradient Property Status Submittal. Date of Prior Submittal:

☐ Submit a **Termination of a Downgradient Property Status Submittal** (complete Sections A, B, I, J and L).

☐ Submit a **Periodic Review Opinion evaluating the status of a Temporary Solution** (complete Sections A, B, H, I, J and L).

Specify one: ☐ For a Class C RAO ☐ For a Waiver Completion Statement indicating a Temporary Solution

Provide Submittal Date of RAO Statement or Waiver Completion Statement:

You must attach all supporting documentation required for each use of form indicated, including copies of any Legal Notices and Notices to Public Officials required by 310 CMR 40.1400.

C. DESCRIPTION OF RESPONSE ACTIONS: (check all that apply)

☐ Assessment and/or Monitoring Only

☑ Removal of Contaminated Soils

☐ Re-use, Recycling or Treatment

○ On Site ○ Off Site Est. Vol.: _____ cubic yards

Describe: _____

☑ Landfill ○ Cover ◉ Disposal Est. Vol.: 315 cubic yards

☐ Removal of Drums, Tanks or Containers

Describe: _____

☑ Removal of Other Contaminated Media

Specify Type and Volume: Transite panels

☑ Other Response Actions

Describe: On-site consolidation and covering of 4,550 cubic yards of soil

☐ Deployment of Absorbant or Containment Materials

☐ Temporary Covers or Caps

☐ Bioremediation

☐ Soil Vapor Extraction

☐ Structure Venting System

☐ Product or NAPL Recovery

☐ Groundwater Treatment Systems

☐ Air Sparging

☐ Temporary Water Supplies

☐ Temporary Evacuation or Relocation of Residents

☐ Fencing and Sign Posting

RECEIVED
SEP - 4 2001
DEP
NORTHEAST REGIONAL OFFICE

SECTION C IS CONTINUED ON THE NEXT PAGE.

Massachusetts Department of Environmental Protection **BWSC-104**
Bureau of Waste Site Cleanup

RESPONSE ACTION OUTCOME (RAO) STATEMENT & DOWNGRADIENT PROPERTY STATUS TRANSMITTAL FORM

Pursuant to 310 CMR 40.0180 (Subpart B), 40.0580 (Subpart E) & 40.1056 (Subpart J)

Release Tracking Number: 3 - 0173

G. DOWNGRADIENT PROPERTY STATUS SUBMITTAL:

☐ If a Downgradient Property Status Submittal Compliance Fee is required, check here to certify that the fee has been submitted. You **MUST** attach a photocopy of the payment.

☐ Check here if a Release(s) of Oil or Hazardous Material(s), other than that which is the subject of this submittal, has occurred at this property.

Release Tracking Number(s): _____

◯ Check here if the Releases identified above require further Response Actions pursuant to 310 CMR 40.0000.

Required documentation for a Downgradient Property Status Submittal includes, but is not limited to, copies of notices provided to owners and operators of both upgradient and downgradient abutting properties and of any known or suspected source properties.

H. LSP OPINION:

I attest under the pains and penalties of perjury that I have personally examined and am familiar with this transmittal form, including any and all documents accompanying this submittal. In my professional opinion and judgment based upon application of (i) the standard of care in 309 CMR 4.02(1), (ii) the applicable provisions of 309 CMR 4.02(2) and (3), and (iii) the provisions of 309 CMR 4.03(5), to the best of my knowledge, information and belief,

> *if Section B indicates that a* ***Downgradient Property Status Submittal*** *is being provided,* the response action(s) that is (are) the subject of this submittal (i) has (have) been developed and implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in 310 CMR 40.0183(2)(b), and (iii) complies(y) with the identified provisions of all orders, permits, and approvals identified in this submittal;

> *if Section B indicates that either an* ***RAO Statement, Phase I Completion Statement and/or Periodic Review Opinion*** *is being provided,* the response action(s) that is (are) the subject of this submittal (i) has (have) been developed and implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, and (iii) complies(y) with the identified provisions of all orders, permits, and approvals identified in this submittal.

I am aware that significant penalties may result, including, but not limited to, possible fines and imprisonment, if I submit information which I know to be false, inaccurate or materially incomplete.

☐ Check here if the Response Action(s) on which this opinion is based, if any, are (were) subject to any order(s), permit(s) and/or approval(s) issued by DEP or EPA. If the box is checked, you MUST attach a statement identifying the applicable provisions thereof.

LSP Name: Robert A. Dangel LSP #: 7798 Stamp:

Telephone: 617-452-6267 Ext.: _____

FAX: (optional) 617-452-8267

Signature: _____

Date: 8/20/01 8/30/01

COMMONWEALTH OF MASSACHUSETTS — ROBERT A. DANGEL No. 7798 REGISTERED LICENSED SITE PROFESSIONAL

COMMONWEALTH OF MASSACHUSETTS — WILLIAM R. SWANSON No. 6406 REGISTERED LICENSED SITE PROFESSIONAL

I. PERSON MAKING SUBMITTAL:

Name of Organization: Buckley and Mann, Inc.

Name of Contact: Richard Mann Title: Owner

Street: 11 Northwood Drive

City/Town: Walpole State: MA ZIP Code: 20281-0000

Telephone: 508-668-9146 Ext.: _____ FAX: (optional) _____

J. RELATIONSHIP TO SITE OF PERSON MAKING SUBMITTAL: (check one)

☑ RP or PRP Specify: ◉ Owner ◯ Operator ◯ Generator ◯ Transporter Other RP or PRP: _____

☐ Fiduciary, Secured Lender or Municipality with Exempt Status (as defined by M.G.L. c. 21E, s. 2)

☐ Agency or Public Utility on a Right of Way (as defined by M.G.L. c. 21E, s. 5(j))

☐ Any Other Person Submitting This Form Specify Relationship: _____

SSR

Application No. 92-3-0173-1

✓ Database
__ File

SCANNED

WAIVER TRACKING FORM

Municipality: NORFOLK

Site Name: Buckley & Mann

Site Address: 17 Lawrence Street

Consultant: Camp Dresser & McKee Inc.

Date Application Received: Boston 5/1/92 Woburn 6/2/92

Has the site been previously classified? __ Yes X No

Disposition:

__ Priority ✓ Non-Priority

✓ Approved __ Denied Date: 10/5/92

Recommendation for Audit:

		least				most
(1)	Extent/Nature of Contamination	1	**2**	3	4	5
(2)	Deficiencies in Site Definition	1	**2**	3	4	5
(3)	Site/Remedial Complexity	1	**2**	3	4	5
(4)	Potential for Receptor Impact	1	2	3	**4**	5
(5)	Other Considerations	1	2	3	**4**	5

Total: 14

Comments: Manufacturing facility which discharged wastewaters from dyeing operations into on site lagoons up until 1986. Metals, petroleum, B/N found in lagoon soils. Groundwater not impacted. Private wells in immediate vicinity.

Hold Dates: 1) 7/13/92 - 8/10/92; 2) 8/19/92 - 8/24/92

Reason: 1) Requested additional information regarding private wells, UST's, site definition, ISCF revisions.
2) Requested recent soil sampling data.

Prepared By: Thomas P. DiPersio (TD) **Date:** 9/30/92
Title/Affiliation: Environmental Engineer **Total Hours:** ~~34~~ 35 (TD)
PEER Consultants, P.C. / SARSS

3-0173

SECTION VIII
WAIVER APPLICATION DISPOSITION
(For DEP Use Only)

1. **Application Number:** 92-3-0173-1 **Date Application Received:** 6/2/92

2. **Applicant Name:** Mr. Richard Mann, Buckley and Mann, Inc.

   Applicant Address: 17 Lawrence Street
   Norfolk MA 02056
   (City/Town) (State) (Zip)

3. **Site Name:** Buckley and Mann

4. **Site Address:** 17 Lawrence Street Norfolk
   (City/Town)

5. **Site ID Number:** 3-0173

6. **Disposition**

Waiver Application Determination. **(Check One)**

[X] **Approved.**

Conditions of Approval: 1) See addendum conditions on reverse side
2) See conditions as outlined in attached letter, dated October 5, 1992

[ ] **Denied.**

Basis for denial:

Application reviewed by: **Stephen M. Johnson**
Acting Chief, Site Management Branch

Signature: Stephen M. Johnson **Date:** 10/5/92

Acceptance of Waiver Application Disposition

I understand and agree to any and all additional conditions specified above for an approved application.

Robert D. Mann 2/22/93
(Signature of Applicant) (Date)

Applicant: For approved waiver applications, sign and date both disposition forms. Return one completed copy to the Department within 60 days of the approval date, retain the second copy for your records. **NOTE:** The approval will become invalid if the disposition form, signed and dated by the applicant, is not received by the Department within 60 days of the approval date.

Send completed form to:

Department of Environmental Protection
Northeast Regional Office
10 Commerce Way
Woburn, MA 01801
Attn: Site Management/ Waiver Unit

DEP FEB 23 1993

MEMORANDUM

TO: File No. **3-0173-1**, Buckley & Mann, Inc.
17 Lawrence Street, Norfolk

FROM: Thomas P. DiPersio, Environmental Engineer
SARSS Contractor, PEER Consultants, P.C.

DATE: September 28, 1992

SUBJECT: Waiver Reconnaissance/Site Summary

On Wednesday, August 19, 1992, at 8:30 am, Tom DiPersio of PEER Consultants, P.C. met with Robert Dangel of Camp Dresser & McKee Inc. (CDM), and Richard and Stephen Mann of Buckley & Mann, Inc., at the property located at 17 Lawrence Street in Norfolk (the site). The conditions were sunny, with temperatures in the seventies.

The text of this memo is based upon information obtained during the site reconnaissance, and provided in reports and correspondences located on file with the Department, and submitted as a part of the Waiver Application (the reports).

The subject site consists of a one hundred-forty acre, primarily undeveloped, property located in a residential and undeveloped area of Norfolk. Buckley & Mann, Inc. has manufactured textiles at the site for approximately 100 years. Certain manufacturing operations conducted during the course of the site's history have involved wastewater streams. Four lagoons (three which have actually been used), associated with historical wastewater discharges, are located at the site. The lagoons received wastewater primarily from two facility operations: the dyeing processes and the carbonization processes. The dyeing process historically involved chrome dyes, and more recently, 'disperse' dyes and some basic and acid dyes. The dyehouse discharged approximately 30,000 to 40,000 gallons per week of wastewater. The carbonizer process (which ceased in 1965) consisted of passing garments through an acidic steam to reclaim the wool. *Solid residues (threads, buttons, zippers, etc.)* were disposed of on site, and the liquid rinse water was discharged to the carbonizer lagoon. No wastewaters have been disposed of on site since 1986. Refer to the attached figure for the locations of the lagoons and other important site features.

The Mill River flows from south to north through the site. The river was dammed, creating Bush Pond, during the 19th century to provide power to the plant through a water wheel and tail race. The tail race still exists, but is not used and does not receive

any water other than surface runoff. CDM reports that groundwater converges toward the river from either side of the site. It also appears that groundwater has an upward gradient, toward the river, at the site. The depth to groundwater ranges from approximately 3 to 9 feet.

Several private wells exist in the vicinity of the site. The residences along Lawrence and Park Streets reportedly receive their water from private bedrock wells. Two private wells also exists on the subject site. CDM contends that, given the level of groundwater contamination detected on site and the hydrologic relationship between any private wells and the site, none of the nearby private wells are, or could be, impacted by on site contamination.

The application materials were reviewed by the Department's Division of Water Supply (refer to the memo from James Persky, DEP-DWS-NERO, dated September 15, 1992). Mr. Persky concludes that "the contaminant levels found in groundwater at the site do not pose a threat to any of the nearby private wells".

The Mill River appears to be the only other potential sensitive receptor associated with the site.

There are presently two fuel oil underground storage tanks (UST's) in use on the site. Three other UST's (gasoline, diesel fuel, mineral oil) were removed in 1986. The primary focus of CDM's environmental assessments was the lagoons. Information presented at the request of the writer revealed that no contamination was encountered upon excavation of the gasoline or mineral oil UST's. Between three and four yards of contaminated soil were excavated with the diesel UST. No other information was available regarding the UST removals.

Sludge (approximately 100 cubic yards) from Lagoon #1 was scraped and stockpiled once, prior to 1975. CDM reports that this material "has thoroughly decomposed, and has the appearance of clean sand". In 1986 the trench leading from the dyehouse to Lagoon #1 was scraped, and 200 cubic yards were stockpiled. A third stockpile was created when Lagoon #2 was scraped. The stockpiles still remain on site.

CDM conducted field investigations at the site in 1986. These activities predated the MCP, and the Department's Division of Water Pollution Control (DWPC) was involved. CDM has subsequently concluded that the remainder of the remedial work should continue under the MCP, based upon the absence of sludge in the lagoons, and the presence of petroleum and metals in the lagoon subsoils.

CDM installed five shallow overburden monitoring wells, as well as one bedrock well, on site in 1986. Soil, groundwater, and surface water sampling was conducted, including soil samples from the lagoon bottoms.

Geology observed in soil borings conducted by CDM is reported to be generally sands and gravels, with some silt.

CDM reports that there are five areas on the site with contaminant concentrations above background levels: 1) the soils in the bottom of the Carbonizer Lagoon; 2) the Carbonizer residue disposal area; 3) the soils in the bottom of Lagoon #1; 4) the soils in the bottom of Lagoon #2; and 5) excavated soils stockpiled to the west of Lagoon #1.

CDM's soil, groundwater and surface water sampling results are presented in the attached tables. In summary, elevated concentrations of metals were detected in soil samples: **cadmium** (up to 28 mg/kg - SS-1), **chromium** (up to 1,300 mg/kg - Lagoon #1 sludge), **lead** (up to 2,440 mg/kg - Lagoon #1 soil pile, 1991 sample), **zinc** (up to 8,200 mg/kg - Carbonizer residue disposal area). **TPH** was detected in soil samples at concentrations of up to 3,350 mg/kg (Lagoon #1 soil pile, 1991 sample). Groundwater and surface water does not appear to have been significantly impacted.

Water samples were collected from the two water supply wells located on the Buckley & Mann property (a bedrock well and a 'dug' well), as well as the bedrock well located at 25 Lawrence Street, in 1986. Analyses revealed no VOC's and no B/N's above MDL's, and no metals above drinking water standards.

The developed portions of the property, and some of the undeveloped portions, were visually inspected by the writer, including the lagoons, the tail race, the soil stockpiles, the disposal area, and the pond. No overt evidence of oil or hazardous materials contamination was evident. The three soil stockpiles (which are over 17, 6, and 4 years old, respectively), as well the disposal area, were completely overgrown with vegetation.

CDM plans to excavate the remaining contaminated soils for aerobic degradation of the petroleum hydrocarbons, prior to disposal of soils containing metals above background concentrations.

The site is situated in a valley, with steep hills rising upwards of seventy-five feet on the east and west sides of the property. See the attached figure for an approximation of topographical contours. The nearby residences to the east and west are situated above the site, at the top of the hills.

Conditions observed during the site reconnaissance were not inconsistent with reports submitted to the Department by CDM. In summary, the nearby private water supply wells appear to be the only complication associated with the granting of a waiver for the subject site. Groundwater does not appear to have been

impacted at the site, although no groundwater sampling has been conducted since 1986 (reportedly no wastewater discharge has occurred since that time, as well). A confirmatory groundwater sampling round may be warranted.

No other complications were observed which would preclude the processing of this Waiver Application.

cc: PEER Consultants

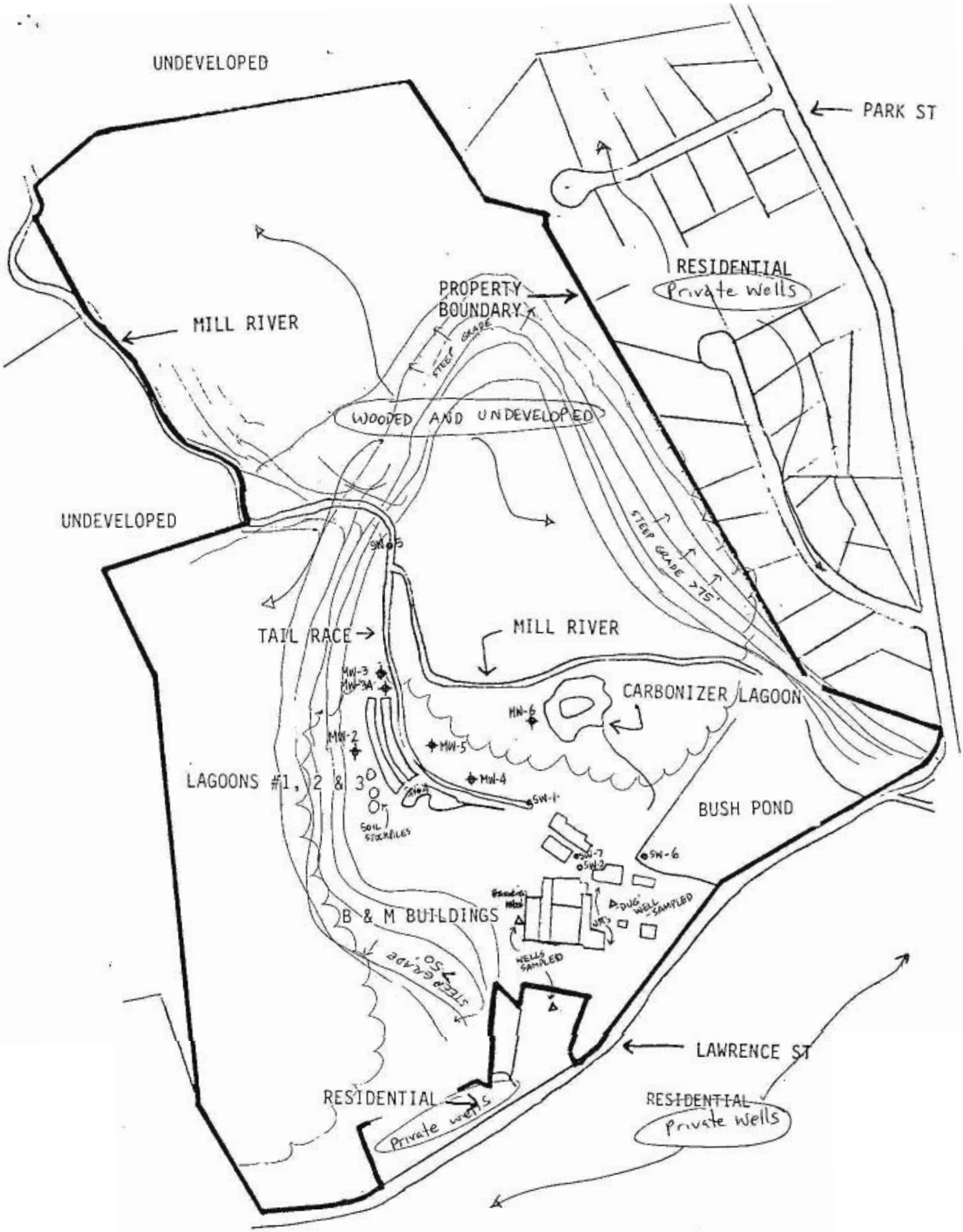

FIGURE 1
BUCKLEY & MANN PROPERTY BOUNDARY
AND ADJACENT LAND USE

Scale 1" is about 430'

TABLE 1

SUMMARY OF ANALYTICAL RESULTS ABOVE MDEP REPORTABLE CONCENTRATIONS FOR SOIL
(mg/kg)

Location Sample ID and (date)	Cr	Pb	Zn	TPH	Total B/Ns	Total VOCs	Ref. No.*
Carbonizer Lagoon							
SS-5 (1986)	450	670					1
Carbonizer Residue Disposal Area							
SS-1 (1986)	1000	1200	8200				1
Lagoon #1 Soils							
SS-4 (1986)	270				92		1
SS-4A (1986)	1300				172	4.2	1
(1988)				210			2
1A+1B (1991)	210			350			4
Lagoon #2 Soils							
SS-3 (1986)	430						1
2A+3B (1991)				1320			4
2B (1991)				590			4
3B (1991)				740			4
4A+4B (1991)				440			4
Trench soils piled W. of Lagoon #1 (1990)				440	9		3
Lagoon #1 soils piled W. of Lagoon #1 (1990)				2600	132		3
5 (1991)		2440		3350			4
MDEP Reportable Concentration	100	200	5000	300			

* References numbers listed in the text at the beginning of Section 5.0.

TABLE 3

METALS

(All Concentrations in mg/l)

	Bush Pd. SW-6	Trailrace Head SW-1	Mill River SW-5	Upgradient Well MW-2	Bedrock Well 25 Law. St. GW-1	Bedrock Well B & M GW-2	Dug Well B & M GW-3
Ag	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Al	0.13	0.29	<0.1	0.21	<0.1	0.22	0.11
As	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016
Cd	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cr	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Fe	0.13	2.8	0.16	<0.025	0.44	<0.025	0.13
Na	20	20	21	8.1	14	21	31
Pb	<0.003	0.004	<0.003	<0.003	0.004	0.006	0.005
Se	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Zn	<0.02	<0.02	<0.02	<0.02	0.02	0.02	<0.02
Hg		<0.0004					

SW-2 Boiler Blowdown Fe 4.5, Na 260

TABLE 3 (Cont'd)

METALS

(All concentrations in mg/kg)

	Soils SS-1	Soils SS-2	Lagoon #1 Sludge SS-4	Lagoon #1 Sludge SS-4A	Lagoon #2 Sludge SS-3	Carbonizer Lag. Sludge SS-5	Carbonizer Lag. Sludge SS-5A
Ag	16	<1.0	<1.0	<1.0	<1.0	5.7	<1.0
Al	27,000	11,000	7600	5900	5900	6700	13,000
As	21	12	2.1	2.9	1.3	4.7	2.7
Cd	28	<2.5	<2.5	<3.8	<2.8	18	2.9
Cr	1000	2100	270	1300	430	450	62
Fe	110,000	13,000	10,000	8400	7700	7600	5800
Na	1300	97	250	850	311	200	96
Pb	1200	38	12	19	12	670	88
Se	0.35	0.50	<0.19	0.57	<0.21	0.97	0.44
Zn	8200	110	930	4600	230	920	260

TABLE 3 (Cont'd)

METALS

(All concentrations in mg/l)

	MW-3	Bedrock Well MW-3A	MW-4	MW-5	MW-6	Lagoon #1 SW-4	Lagoon #2 SW-3
Ag	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Al	0.15	<0.1	0.12	0.31	0.32	0.61	0.27
As	<0.16	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016
Cd	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cr	<0.025	<0.025	<0.025	<0.025	<0.025	0.72	0.09
Fe	<0.025	<0.025	0.11	0.96	1.9	0.76	2.1
Na	9.5	8.3	6.1	9.1	18	180	73
Pb	<0.003	<0.003	0.007	<0.003	0.003	0.03	0.009
Se	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Zn	0.03	<0.02	<0.02	<0.02	<0.02	0.23	0.10

TABLE 4
VOLATILE ORGANIC COMPOUNDS
(All concentrations in ug/l for water and ug/kg/ for soil and sludge)

	Bush Pd. SW-6	Tailrace Head SW-1	Mill River SW-5	MW-2	Bedrock Well 25 Law. St. GW-1	Bedrock Well B & M GW-2	Dug Well B & M GW-3
Detection Limit	10	10	10	10	10	10	10
None	*	*	*	*	*	*	*

	MW-3	Bedrock Well MW-3A	MW-4	MW-5	MW-6	Lagoon #1 SW-4	Lagoon #2 SW-3
Detection Limit	10	10	10	10	10	10	10
None	*	*	*	*	*	*	*
1,1,1-Trichloroethane						P	
Toluene						P	
Xylenes						45	

	Soils SS-1	Lagoon #1 Sludge SS-4A	Carbonizer Lag. Sludge SS-5	Carbonizer Lag. Sludge SS-5A	Septic Tank ST-1	Septic Tank ST-2	Septic Tank ST-3
Detection Limit	25	45	25	25	10	10	10
None	*		*	*	*	*	*
Trichloroethene		45					
Benzene		P					
1,1,2,2-Tetrachloroethene		P					
Toluene		150				91	
Chlorobenzene		1100					
Ethyl benzene		860					
Xylenes		2100				20	

* None - No priority pollutants and no other compounds detected.
P = Present, but at a concentration below the detection limit.

TABLE 5
BASE/NEUTRAL EXTRACTABLE COMPOUNDS
(All concentrations in ug/l)

	Tailrace Head SW-1	MW-2	Bedrock Well 25. Law. St. GW-1	Bedrock Well B & M GW-2	Dug Well B & M GW-3	MW-3	Bedrock Well MW-3A	MW-5
Detection Limit	10	10	10	10	10	10	10	
None	*		*	*	*			
Benzamide N-(1,1-dimethylethyl) -4-Methyl-		6						27
Benzenesulfonamide, N-Butyl						32	11	

*None - No priority pollutants and no other compounds detected.

TABLE 5 (Cont'd)
BASE/NEUTRAL EXTRACTABLE COMPOUNDS

	Lagoon #2 Water SW-3 ug/l	Lagoon #1 Sludge SS-4 ug/kg	Lagoon #1 Sludge SS-4A ug/kg	Septic Tanks ST-C ug/l
Detection Limit	10	3300	1700	10
Priority Pollutants				
1,3-Dichlorobenzene			3200	
1,4-Dichlorobenzene			9100	34
1,2-Dichlorobenzene			5700	
Hexachloroethane	22			
1,2,4-Trichlorobenzene		1600	61,000	
Napthalene	50	10,000	8700	
Acenaphthene	73	8600	5300	
Fluorene	47	3400		
Phenanthrene	33			
Other Compounds				(See Appendix B)
Benzamine	53			
Benzene, 2-ethyl-1,4Dimethyl-	95	7700	3800	
Napthalene, 2-Methyl-	250	11,500	13,000	
1,1-Biphenyl	340	23,000	29,000	
Heptadecane	150	7000	6500	
Dibenzofuran	50	4700		
Isoquinoline		1400		
Naphthalene,2,3-Dimethyl		1300		
Naphthalene,1,2-Dimethyl		2100		
Phenol, 4-Nonyl		10,000	11,000	
Benzene,1,2,3-Trichloro-			4700	
Benzene, 1,2,3,5-Tetramethyl			5400	
Phenol, 4-(2,2,3,3-Tetramethylbutyl)-			6300	

WAIVER RECONNAISSANCE CHECKLIST

TOWN/SITE: Norfolk / Buckley & Mann, Inc. WAIVER NUMBER: 3-0173

STAFF PERSON: Thomas DiPersio DATE: 8/19/92

[1] *ADDRESS – Is the property/site address correct?*..... (yes) no

[2] *WALKOVER/CONSULTANT INPUT – Walk the site, noting pertinent features, topography, locations of source areas, monitoring wells. Try to integrate written (report) information with visual observation, to (1) get a better understanding of site/contaminant conditions, and potential pollutant receptors, and (2) to confirm that site conditions are not inconsistent with what has been presented in report submittals. Question consultant, where necessary to resolve old or newly discovered issues. REMEMBER WAIVER OBJECTIVES: THE SITE DOES NOT NEED TO BE FULLY CHARACTERIZED AT THIS POINT IN THE PROCESS; WE NEED JUST ENOUGH INFORMATION TO CLASSIFY SITE, AND FEEL REASONABLY CERTAIN THAT THE APPLICANT/CONSULTANT APPEAR TO BE ON THE "RIGHT TRACK".*

Where appropriate, screen headspace in key g.w. monitoring wells with PID meter. The purpose of this action is to see if headspace results seem to be consistent with reported information. Key problem areas: Positive headspace reading in well where VOCs were not reported (perhaps leading edge of plume), high readings (hundreds of ppm v/v) or strong odors indicating floating product (where none was reported).

a. *Was consultant present during inspection?*..... (yes) no

b. *Were site conditions INCONSISTENT with submitted reports?*..... (NO) YES
(If yes, explain fully in site reconnaissance memo)

[2] *PROBLEMS – Don't spend a lot of time looking, but note if:*

a. *Unreported drums with unidentified origin or contents?*..... yes (no)

b. *Contaminated soil stockpiles present more than 4 months?*..... (yes) no
(IF UNCOVERED, REQUIRE THAT THEY BE COVERED IMMEDIATELY)

c. *Discharge pipes of unknown origin/exhibiting contamination?*..... yes (no)
(See Memo)
(IF YES, NOTIFY DEP SUPERVISOR UPON RETURN TO OFFICE)

d. *Surficial and/or other contamination not addressed in submitted reports?*.....yes (no)

e. *Vent pipes indicating unidentified/unreported UST?*..... yes (no)

f. *Does there appear to be any schools near (<500 ft) the site?*..... yes (no)

[over]

Norfolk
17 Lawrence ST

CDM Camp Dresser & McKee Inc.

consulting engineering construction operations

One Cambridge Place
50 Hampshire Street
Cambridge, Massachusetts 02139
Tel: 617 452-6000 Fax: 617 452-8000

JB

UIA

SCANNED

October 10, 2001

Karen Stromberg
Department of Environmental Protection
Bureau of Waste Site Cleanup
Northeast Regional Office
205A Lowell Street
Wilmington, MA 01887

Subject: Buckley & Mann Inc., Bureau of Waste Site Cleanup #3-0173

Attached is a copy of the Legal notice published to announce the October 23, 2001 public meeting for the subject site.

If you have any questions, you can reach me at (617) 452-6267.

Very truly yours,
CAMP DRESSER & McKEE INC.

Robert A. Dangel
Licensed Site Professional

cc: Richard & Stephen Mann

ORO - Avail 11/1. 5 bdrm., hardwood, cable, 2nd fl. owner ant. Non-Smoker pre- No Pets. $1200/mo. 786-9943.

ORO - 1 bdrm. apt., r., gas heat, no pets. o train. New windows, sulated, nice condi- 500. 508-431-2085.

ORO - 1 bedroom, hopping, train. $525/ leferences req. (508) 930, leave a message.

ORO - 1 BR w/office 2nd flr, off street park- st for 1 person. appl/ icl. no pets/no smok- 00/mo. w/sec dep. 11/1 (508) 226-0723

ORO - Duplex-6 rm. an, attic, bsmt. & gar. alk to T, avail. 11 /1, s, $1,000/mo. + sec. 6-1840 aft 5:30p.m.

ORO - Lrg. 3 br's. Gt. & bath. Nice quiet area. Walk to Train. no. (617) 327-1046

ORO - 3rd floor, 6 , 3 bedrooms. $900/ . Walk to train and Call 508-294-3950 or 1-1223.

ORO - 3rd flr., 2 large apt. great area. o. First, last & sec. all 508-226-2907 for fo.

NORTH ATTLEBORO - Studios, Apts., Townhouses, Duplexes. $600 & up. No pets, please. (508) 695-6950

FOXBORO'S FINEST APTS. 2 BR., 1 or 1.5 ba., heat & hw incl'd. Storage. No pets. Pool & clubhouse. Mayfair Realty, 543-4697/543-1751 www.mayfairrealty.com

MANSFIELD - 2 Bdrm., lg. kitch., w/d h.u., walk to T, $725/mo. incls. heat, cat o.k. Avail. 11/1. 508- 543-3562

MANSFIELD - 1/2 Duplex, Mdrn, 2 br, 1.5 ba., w/w., yard. Lease. Lst, Sec., No Pets. $1075. 781-551-4433

MANSFIELD - Lg 2 bdrm apt., Close to town & train. Lg e-i-kit, newly remodeled, $950/ mo plus utils. (508) 339-9089

Mansfield Millhaus
Large 1 BR., walk to T, w/w, a/c, pool, tennis. $850 + util. 508-643-7379 RE

MANSFIELD - Modern, 1/2 duplex, 3 br., 1-1/2 ba., cntrl air. No pets. Lease, last mo. sec. $1300. (508) 543-4900.

MANSFIELD - New luxury 2 br. gs. ht., w/w., a/c., ful. appl., Rsrvd. prk., No Util/Dogs. $995/mo. 508-261-1861.

MANSFIELD - Newly renov'd., 1 bdrm. apts., 1st & 2nd flr., close to T & hwy., appli., no pets, $850-$950, 1st/last & sec. 508-942-8418.

Washer/ dryer in basement. No pets. $900/mo. RE/MAX Real Estate Center 508-543-3922 Ext. 353 (Jack)

NORTON - Modern, oversized 1 br. Res. area. $650/mo. No utilities. 1 mi. off Rt. 495. No pets. (508) 230-7600, M-F.

PAWTUCKET/MA LINE - Off 95. Victorian, 1 br., (3 rms). No Pets. Heat. $540/mo.+ sec. 401-723-2670.

PAWTUCKET - Near Hosp., 3rd flr., 5 rm., stove & frig., no util., sec. dep. w/d h.u., no pet. $500. (401) 722-8266

PLAINVILLE - 2 BR. $800-$875 w/w, a/c, indry, parking, lg. playground. exc. loc. No pet. 617-527-3631, 9-6p.

S. ATTLEBORO - Beautiful 2 bdrm. apt., w/ garage on pond in Cabe, avail. now, $750. 1st/ last, gas heat, no pets. 508-761-5503.

S. ATTLEBORO 2 Rms., 1 st flr., on bus line, all util., quiet, no pets. $575/mo. Call (508) 761-7498

SOUTH ATTLEBORO - 3 bedroom, No pets, non smoking. 1st/ last, and securtly deposit. $850 per month. Please Call 508-761-5022

Wrentham - 4 rm. apartment over detatched garage. Rent; $800. not inc. heat and elec. Needs refrigerator. Avail. 9/1. Call 508-384-8121.

Brook Haven Estates
508-226-1480
Relocate to a beautiful apartment community nestled among 26 acres of wooded & landscaped charm. Featuring seasonal indoor pool, tennis, playground, etc. 2-room studios, 1 & 2-bdrm. apts. from $600-$880.

133 - Apt. Furnished

MANSFIELD - FURNISHED Studio, close to T, pool, $875. Short or long term. Call 508-337-8077.

N. ATTLEBORO - 1 or 2 room effic. apts.; both furn'd., all util. incl., central resid. loc., prkg., immed. occup. $150/ wk. & up. (508) 699-2816.

134 - Garages

ATTLEBORO - Garages for rent; 100 month; 8x18 electric available. 508-395-5978 days; 508-223-0584 eves.

NORFOLK
Garage 37'x16',$495 month, $375 if used for storage. 12'6"x9' Dr. 508-520-4684.

139 - Condominiums

S. ATTLEBORO - Condo. 4 rm., 1.5 ba., full bsmt., w/d h.u., appl. No pts/smk. Close to 95/T. 508-272-0334.

140 - Townhouses

ATTLEBORO - For Rent. SugarCreek, 2 bdrm., 1 1/2 bath, garage, central air. Avail. Immediately. No Pets/ Smkg. $1400/mo. 508-942-9492

N. ATTLEBORO - Lrg. 2 br., Lg. closets. Lrg. kit., 1.5 ba., garage, No pets. $1100/mo. Avail. 11/1. 508-309-3101.

NORTON - 2 bdrms., 1½ baths, immed. occup. Super location! $1350/mo. W.P. SMITH R.E. 508-226-4161, ask for Walter.

PLAINVILLE - Available. Nov. 1st. 41 Lincoln Ave., 3 br., 1.5 baths, 1-car garage. Close to hwy & shopping center. No Smkg. $1,400/ mo. (508) 966-4600 x3025

PLAINVILLE - 2 Bedroom. Wash-dry. H.U. Off street parking. $1,000/mo + ultil. ist., & sec. 508-643-3646.

141 - Wanted to Rent

WANTED - 1 Bedroom apt., have small Pug; quiet. Can pay $600-$650. Need desperately. Call 508- 761-7518

151 - Broker Listings

ATTLEBORO - $119,900 over 1200 sq. ft. of space for that special creative buyer. Agnes Fountas Realty. 508-222-4400.

BUYING A HOME HAS NEVER BEEN MORE AFFORDABLE ... ... OR EASIER!
Interest rates for home purchase are **LOW.** To facilitate the flood of buying opportunities, a new interactive service has been developed to explore your mortgage potential in less than 3 minutes.

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Dufault

CITY OF ATTLEBORO MASSACHUSETTS 1694

CITY OF ATTLEBORO
Inspection Department
LEGAL NOTICE

This is to notify you that an application has been made to the Inspector of Buildings by:

Marjorie Dufault for a wood fence 4' and 6' in height located at 35 Carl Jordan Dr., Attleboro, MA

Mike Barrett for a wood fence 6' in height located at 43 Steeple Chase Cir., Attleboro, MA.

Ordinance entitled, "HEIGHT AND SPACING".

Heather L. Uriot, Senior Clerk

10:4

200107-0553, 220 Park Street

NOTICE OF MORTGAGEE'S SALE OF REAL ESTATE

By virtue and in execution of the Power of Sale contained in a certain mortgage given by **Jeanne E. Stoffiet and William J. Stoffiet** to FT Mortgage Companies D/B/A Carl I. Brown Mortgage, dated November 26, 1997 and recorded with the Bristol County (Northern District) Registry of Deeds at Book 7388, Page 14, of which mortgage First Horizon Home Loan Corporation f/k/a FT Mortgage Companies d/b/a Carl I. Brown Mortgage is the present holder, for breach of the conditions of said mortgage and for the purpose of foreclosing, the same will be sold at Public Auction at 11:00 a.m. on October 19, 2001, on the mortgaged premises located at 220 Park Street, Unit No. 3 Alden Square Condominium, North Attleboro, Bristol County, Massachusetts, all and singular the premises described in said mortgage,

TO WIT:

Unit No. 3 Alden Square Condominium created by Master Deed dated April 14, 1989 and recorded in the Bristol County Northern District Registry of Deeds in Book 4102, Page 224, as amended, and shown on a

400 - Legal Notices

ing encumbrances of record which are in force and are applicable, having priority over said mortgage, whether or not reference to such restrictions, easements, improvements, liens or encumbrances is made in the deed.

TERMS OF SALE:

A deposit of Five Thousand ($5,000.00) Dollars by certified or bank check will be required to be paid by the purchaser at the time and place of sale. The balance is to be paid by certified or bank check at Harmon Law Offices, P.C., 150 California Street, Newton, Massachusetts 02458, or by mail to P.O. Box 610389, Newton Highlands, Massachusetts 02461-0389, within thirty (30) days from the date of sale. Deed will be provided to purchaser for recording upon receipt in full of the purchase price. The description of the premises contained in said mortgage shall control in the event of an error in this publication.

Other terms, if any, to be announced at the sale.

FIRST HORIZON HOME LOAN CORPORATION F/K/A FT MORTGAGE COMPANIES D/B/A CARL I. BROWN MORTGAGE

Present holder of said mortgage

By its Attorneys,

HARMON LAW OFFICES, P.C.

Autumn S. Sarzana, Esquire

150 California Street

Newton, MA 02458

(617) 558-0500

9:27; 10:4, 10:11

October 11th Hearings

CITY OF ATTLEBORO MASSACHUSETTS 1694

ATTLEBORO
ZONING
BOARD OF APPEALS
NOTICE
OF PUBLIC HEARINGS
OCTOBER 11, 2001

In accordance with the MGL, Ch. 40A, as amended, public hearings will be held

400 - Legal Notices

gle Residence-B zoning district.

Case #4269: The application of **Duffy-Poule Funeral Service, Inc.** for an appeal from the Ruling of the Building Inspector pursuant to §17-8.8 Appeal relative to the decision of the Building Inspector relative to a fence building permit, said premises being **20 Peck Street,** more specifically Assessor's plat #31, lot #69, located in a General-Residence-A zoning district.

Case #4271: The application of **David Bonenfant** for a special permit pursuant to §17-9 Special Permits and §17-10.4 Home Occupation to conduct a home business at his place of residence at **16B Holden Street,** more specifically Assessor's plat #48, lot #119, located in a Single-Residence-B zoning district.

Case #4272: The application of **Liberty Estates MHP, LLC,** for special permit pursuant to §17-9 Special Permits and §17-6 Non-Conforming Uses, Structures and Lots to replace a non-conforming structure (a mobile home) with a mobile homes and variance pursuant to §17-8.9 Variances from the minimum sideyard setback requirement to construct the new mobile home, said premises being **21 Terry Drive,** more specifically Assessor's plat #75, lot #78, #79 and #82, plat #76, lot #508 and plat #26, lot #274, #270B and #270B1, located in a Single Residence-B zoning district.

Case #4273: The application of **David and Patricia Cross** for a variance pursuant to §17-8.9 Variances from the minimum sideyard setback requirement to construct an attached 26'x30' two-stall garage onto an existing dwelling, said premises being **821 Read Street** more specifically Assessor's plat #23, lot #43C, located in a Single Residence-D zoning district.

Case #4274: The application of **Edward and Stephanie Shanley** for a special permit pursuant to

400 - Legal Notices

Buckley & Mann Inc.

NOTICE OF A PUBLIC INVOLVEMENT PLAN MEETING
BUCKLEY & MANN INC.
17 LAWRENCE STREET
NORFOLK, MA 02056
3-0173

Buckley & Mann Inc. received a petition from residents in Norfolk, MA requesting this location be designated as a Public Involvement Plan site, in accordance with MGL c.21E §14(a). This law requires that, upon receiving such a petition, a plan for involving the public in decisions regarding remedial response actions subsequent to the petition filing must be prepared and a public meeting to present the proposed plan held. In this case, the site had reached a condition of No Significant Risk prior to the petition filing.

Buckley & Mann Inc. designated this site as a Public Involvement Plan site on September 19, 2001. A public meeting will be held at on Tuesday October 23, 2001 at 7 P.M. in the auditorium at the Freeman/ Centennial School, Boardman Street, Norfolk to describe the assessment, containment and removal work completed to reach a condition of No Significant Risk. Copies of the Response Action Outcome report and prior reports are available for review at the Norfolk Public Library and the Norfolk Conservation Commission office in Town Hall.

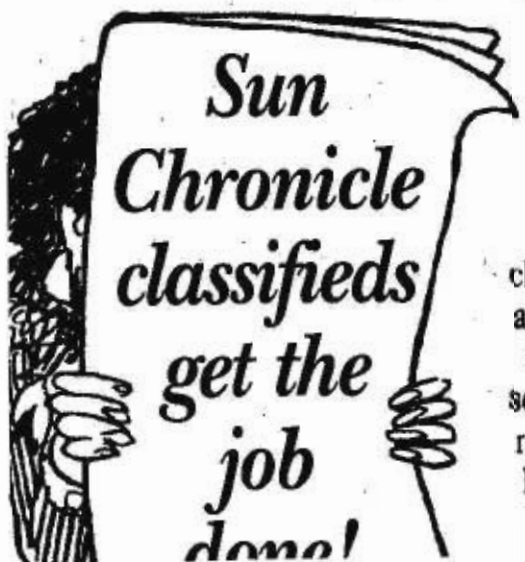
Any questions regarding this meeting or the Public Involvement Plan should be directed to Mr. William R. Swanson, Licensed Site Professional-of-Record, Camp Dresser & McKee, Inc., One Cambridge Place, 50 Hampshire Street, Cambridge, Massachusetts 02139 at (617) 452-6000.

10:4

C. J. Scooters

TOWN OF MANSFIELD MASS.

EMPLOYERS:



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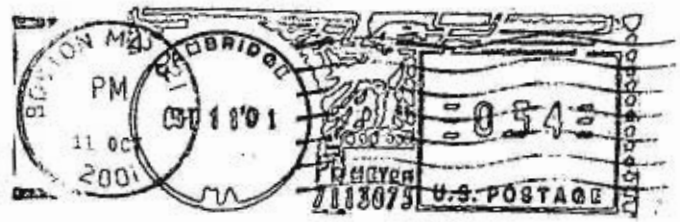

KAREN STROMBERG
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BWSC NERO
205A LOWELL ST
WILMINGTON MA 01887
01887+2341

Norfolk
17 Lawrence St
SCANNED
WA

MEMORANDUM

To: Mr. Robert A. Dangel, LSP, Camp Dresser & McKee
Cc: Ms. Karen Stromberg/DEP-NERO, Mr. William R. Swanson, VP, Camp Dresser & McKee
Cc: Buckley and Mann, Inc.
Cc: Norfolk Board of Selectmen, Norfolk Town Administrator, Norfolk Board of Health, Norfolk Conservation Commission, Norfolk Golf Committee
Cc: National Golf Foundation, Earth Tech (both via Town Administrator)
From: Public Involvement Plan (PIP) petitioners - Buckley and Mann property, Norfolk
Date: October 3, 2001
Re: August 2001 Class A-3 Response Action Outcome and Release Abatement Measure Completion Report, Buckley and Mann, Inc., Norfolk, MA

This document has been prepared by members of the Public Involvement Plan (PIP) group for the Buckley and Mann site in Norfolk, MA, in preparation for the October 23, 2001 public hearing. Following our review of the RAO, we have assembled a list of questions regarding the work done to date. For your convenience, we are making this list available in advance of the meeting, and we would appreciate a written list of responses.

The document is structured as follows: Section 1 addresses site assessment and remediation activities; Section 2 describes the risk characterization conducted at the site; and Section 3 discusses the Activity and Use Limitation implemented prior to filing the Response Action Outcome.

1.0 SITE ASSESSMENT AND REMEDIATION ACTIVITIES

1.1 Areas Included in the Response Action Outcome (RAO)

The following section describes the portions of the site that have been investigated and included within the Response Action Outcome.

As described in the report, work to date has been limited to approximately 12 acres of the 143-acre property. These 12 acres, which comprise the extent of the disposal site covered by the Response Action Outcome (RAO), include a 2-acre former on-site landfill; three lagoons, each approximately 1 acre in extent; and seven acres of adjacent land located between the Tail Race (which is a manmade brook) and the Mill River. Within this area, the following were identified as areas of concern during site investigation activities:

- Area #1 - material at the bottom of Lagoon #1
- Area #2 - material at the bottom of Lagoon #1
- Areas #3, 4, and 5 - material excavated from Lagoon #1 in 1975 and 1988
- Area #6 - material excavated from the former dyehouse trench to Lagoon #1

- Soil samples from Areas #3, #4, #5, and #6, all of which represented materials removed from the bottom of Lagoon #1 or the trench between the dyehouse and the lagoon, had one or more of the following compounds: lead, chromium, total petroleum hydrocarbons, and certain Polynuclear Aromatic Hydrocarbon (PAH) compounds.

- At least two solid samples were collected from the carbonizer lagoon area in 1988, and were found to have metals including lead and chromium. Two additional samples were collected in 1992, from the edge of the carbonizer lagoon and from the trench to the carbonizer lagoon; these samples were reported to have metals, total petroleum hydrocarbons, and polychlorinated biphenyl compounds (PCBs). In addition, a sample of carbonizer washtub discharge (with buttons, buckles, zippers, and fibers) and a sample (with old brick, glass, and rubbish) from a disposal area near the carbonizer that was periodically burned were also analyzed in 1992; these areas are reported to have been consolidated into Area 10.

- The following compounds were detected in soil samples from landfill Area #10: lead, chromium, total petroleum hydrocarbons, and certain Polynuclear Aromatic Hydrocarbon (PAH) compounds.

1.3 Remediation Activities

As described in Section 7 of the RAO, a Release Abatement Measure (RAM) Plan was implemented between 1998 and 1999 to reduce the risk posed by soil at the site.

In brief, the material in Area #10, part of which falls within a wetland buffer zone, was excavated. The material was sorted to remove debris such as concrete, lumber, machinery, building debris, and other solid (non-hazardous) waste, which was stockpiled for future disposal (according to the RAO, this will be conducted at the time of building demolition). Approximately 315 cubic yards of material from test pit #10, which was known to have high levels of chromium and lead, were shipped off site for disposal.

The rest of the excavated material from Area #10, plus materials from Areas #3 through #8 and Area #12, were visually inspected and were then consolidated at the former location of Area #10. The consolidated material was graded and covered with a geotextile fabric, followed by 3 feet of clean sand cover. This area is subject to an Activity and Use Limitation (deed restriction).

1.4 Reviewer Questions and Comments re: Site Investigation and Remediation Activities

Has the vertical extent of contamination in the soil been delineated, as required by the MCP (310 CMR 40.0904(2))?

[This review did not note any references to vertical delineation in any areas of the site. In paricular, it was noted in the Appendix A, Nov/Dec 1997 report summary that "the depth of the fill material in Area #10 was not fully known [...]." Since metals and PAH compounds are documented to have been present in the fill material sampled by the shallow test pits in Area #10, it is possible that additional

Further, 310 CMR 40.0036(4) says that any failure of materials or procedures used in employing the base layer or cover layer as described in 310 CMR 40.0036(3) shall be immediately repaired, replaced, or re-secured.]

2.0 RISK CHARACTERIZATION

No risk characterization was included in the RAO document. It is assumed, from references throughout the document, that a Method 1 risk characterization was conducted, with a Method 2 used to evaluate the risk posed by biphenyl in the solid samples from the lagoons.

It is further assumed, based on a statement in Appendix B, that S-2 standards are being applied to Area #10 following the installation of clean cover material, and that S-1 standards apply to the rest of the site. The applicable groundwater standards are GW-1 due to the site's location within a Zone II for public water supply wells, and GW-3 to protect surface waters.

2.1 Comparison of Chemical Concentrations to Standards

Soil: In Section 10.2, the RAO refers to the soil currently under cover in the Area #10 Consolidation Area as follows: "The averages for several PAH compounds and lead exceed MCP S-1 and S-2 standards. The Total Petroleum Hydrocarbon (TPH) concentrations exceeded the current (2001) MCP standards, although the TPH test has since been replaced by the Extractable Petroleum Hydrocarbon (EPH) procedure [...]"

Groundwater: Groundwater sampling was conducted in 1998, when the concentrations of dissolved PAHs (in 3 select wells) and metals (in 8 wells) were found to be below applicable standards. Analysis for PCBs, which were detected in the carbonizer lagoon samples, was not conducted. No groundwater sampling was conducted following the excavation and consolidation activities at the site.

Sediment: [Note to readers: This section describes solid samples collected from the bottom of lagoons at the site. Such materials are commonly described as sediment, and the recommended benchmarks for evaluating sediments are typically much lower than the equivalent standards for soil. However, in Appendix G, Camp Dresser & McKee referred to the solid samples collected from the bottom of the Lagoons #1 and #2 as follows: "CDM uses the term soil, rather than sediment, because the lagoons are man-made and the bottoms were graded with sand and gravel during construction and in the case of Lagoon #1, subsequent maintenance. The soil on the bottom is not naturally deposited sediment like that found in ponds." This interpretation is open to question (see below).]

Section 10.3 of the RAO describes Lagoons #1 and #2 and states that in 1995 "metals concentrations in the Lagoon soils were below MCP S-1/GW-1 and S-1/GW-3 standards, and that naphthalene and methylnapthalene slightly exceeded the S-1/GW-1 limits. The 1995 Total Petroleum Hydrocarbon (TPH) concentrations exceeded the current (2001) MCP standards, although the TPH test has since been replaced by the Extractable Petroleum Hydrocarbon (EPH) procedure". In referring to data collected in October 2000, it states that "only one PAH compound, biphenyl, exceeded MCP S-1/GW-1 standards. The biphenyl concentrations ranged from 1.6 to 2.6 mg/kg, relative to the 1 mg/kg standard. "

characterization. This can be done by comparing data to sediment benchmarks as part of a Stage I Environmental Screening.]

Why was a Method 3 Risk Characterization not conducted for the site?

[There are several situations in which a Method 1 may not be used, and a Method 3 risk characterization is required by the MCP. Section 310 CMR 40.0971 of the MCP states that if contamination is present in one or more environmental media other than soil or groundwater, Method 1 alone shall not be used. Sediments and surface water both meet the definition of other media, so at this site, the presence of sediments as described above, as well as the presence of contaminants in surface water as stated in Section 6 of the report, would require the use of a Method 3. Also, Section 310 CMR 40.0942 of the MCP requires that a Method 3 be conducted if environmental receptors have been identified for a site, and if OHM known to bioaccumulate are present within 2 feet of the ground surface, as is the case in the lagoons].

[Additional Reviewer Notes: this review included a preliminary comparison of the sediment data from the two wastewater lagoons and the carbonizer lagoon to DEP-recommended freshwater sediment benchmarks (EPA region IV, OSWER, and the Ontario MOE low values). The results indicated that the average concentration of cadmium, chromium, mercury, lead, and zinc in samples from the carbonizer lagoon and trench, as documented in Table C-1, were 2 to 10 times higher than the recommended benchmarks. Samples from the carbonizer lagoon area also had PCB levels ranging from 0.2 to 0.76 mg/kg, compared to benchmark values of 0.023 to 0.070 mg/kg. Similarly, PAH and chromium values, as well as the biphenyl values consistently present in solid samples from the base of Lagoon 1 and Lagoon 2, exceeded the corresponding sediment benchmarks. A thorough ecological risk evaluation, including potential impact to surface water and wetlands posed by all contaminants including PCBs, would be needed to characterize the potential risk associated with the affected wetlands areas of the site.

Also, Appendix B of the RAO, in referring to the carbonizer lagoon area, concludes that remediation would be contrary to DEP policy discouraging work in wetlands solely to reduce contaminant concentrations to background. It should be noted that the MCP and associated DEP regulations make a distinction between concentrations that exceed applicable risk-based standards/benchmarks and concentrations that exceed background; in the case of the former, remediation is required to achieve a condition of No Significant Risk.]

Norfolk
17 Lawrence St.
3-0173

CDM Camp Dresser & McKee Inc.

consulting
engineering
construction
operations

One Cambridge Place
50 Hampshire Street
Cambridge, Massachusetts 02139
Tel: 617 452-6000 Fax: 617 452-8000

SCANNED

September 24, 2001

Karen Stromberg
Department of Environmental Protection
Bureau of Waste Site Cleanup
Northeast Regional Office
205A Lowell Street
Wilmington, MA 01887

Subject: Buckley & Mann Inc., Bureau of Waste Site Cleanup #3-0173

The DEP recommended text for PIP public meeting announcements is not really applicable to the situation at the Buckley & Mann Inc. site. The Response Actions (defined in the MCP as assessment, containment and/or removal) were completed in December 2000, and the site had reached a condition of No Significant Risk seven months before the PIP petition was filed. Preparing and filing the RAO documentation is in itself not a Response Action. The Response Action work was completed under a RAM, and with full disclosure to the Norfolk Conservation Commission, including a public hearing.

The MCP, at 40.1405 (4) states "Public Involvement Activites required at PIP sites shall pertain to those response actions conducted after the submission of the PIP petition...". Consequently, it is not appropriate to conduct a meeting with the expressed intent of discussing a plan for Public Involvement in future Response Actions- none are planned in the area subject to the RAO, unless required by the DEP subsequent to an audit of the RAO.

Although the area covered by the RAO does not include the entire B&M property, there has not been a reportable release outside of the area addressed by the RAO. Any potential buyer of the property would likely want to make an independent (of B&M) assessment of these areas. Such an assessement should occur after the pending demolition and removal of buildings in the factory area. This assessment work will likely be performed by the buyer, not B&M, and hence cannot be subject to planning review under the PIP submittted to B&M.

CDM proposes the attached modified Notice. Please review the proposed notice and let me know if you have any comments. You can reach me at (617) 452-6267.

Very truly yours,
CAMP DRESSER & McKEE INC.

Robert A. Dangel
Licensed Site Professional

cc: Richard & Stephen Mann

9/28/01
Told Mr. Dangle notice is ok because I'm not requiring preparation of the PIP as long as these RI activities occur. K. Stromberg

DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT

NOTICE OF A PUBLIC INVOLVEMENT PLAN MEETING

BUCKLEY & MANN INC.
17 LAWRENCE STREET
NORFOLK, MA 02056
3-0173

Buckley & Mann Inc. received a petition from residents in Norfolk, MA requesting this location be designated as a Public Involvement Plan site, in accordance with MGL c.21E §14(a). This law requires that, upon receiving such a petition, a plan for involving the public in decisions regarding remedial response actions subsequent to the petition filing must be prepared and a public meeting to present the proposed plan held. In this case, the site had reached a condition of No Significant Risk prior to the petititon filing.

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Any questions regarding this meeting or the Public Involvement Plan should be directed to Mr. William R. Swanson, Licensed Site Professional-of-Record, Camp Dresser & McKee Inc., One Cambridge Place, 50 Hampshire Street, Cambridge, Massachusetts 02139 at (617) 452-6000.

CDM Camp Dresser & McKee Inc.

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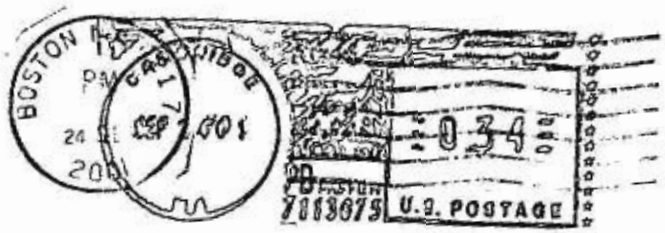

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SCANNED

January 14, 2002

Public Involvement Plan Group
C/o Catherine Elder
117 Seekonk Street
Norfolk, MA 02056

U/A

Subject: Buckley & Mann Inc., Bureau of Waste Site Cleanup #3-0173

Dear Public Involvement Plan Group:

Camp Dresser & McKee Inc. (CDM) is pleased to submit the attached responses to the is Public Involvement Plan Group's written questions submitted prior to and after the October 23, 2001 public meeting.

If you have any questions, please contact me at (617) 452-6267.

Very truly yours,

Robert A. Dangel, L.S.P.
Principal Scientist
Camp Dresser & McKee Inc.

cc: Richard and Stephen Mann

Town of Norfolk
Conservation Commission
Town Hall
P.O. Box 316
Norfolk, MA 02056

Karen Stromberg, also DEP files
Department of Environmental Protection
Bureau of Waste Site Cleanup
Northeast Regional Office
205A Lowell Street
Wilmington, MA 01887

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RESPONSE TO PUBLIC INVOLVEMENT PLAN GROUP COMMENTS AND QUESTIONS DATED OCTOBER 3, 2001

SECTION 1.4 SITE ASSESSMENT AND REMEDIATION

1. Has the vertical extent of the soil contamination been delineated?

The question refers to Appendix A of the RAO report, where the November/December 1997 Revised Release Abatement Measure Plan is briefly summarized. The PIP Group refers to the statement "the depth of the fill material in Area #10 was not fully known...". This statement was written in 1997, prior to remediation in Area #10, and reflects the knowledge at that time, when only test pits had been dug. In 1998, when Area #10 was excavated under the Revised Release Abatement Measure Plan, all of Area #10 was excavated and inspected. Excavation proceeded down to native soils and hence, the depth and extent of the fill material in Area #10 was delineated. The original test pits, excavated in 1995 were representative of the Area #10. Section 6 of the RAO report includes a brief summary of the test pit observations.

The question also refers to the extent of contamination adjacent to or beneath the earthen bank of the Dye House Lagoons #1 and #2. The Lagoons are located in a area where groundwater in the unconsolidated overburden soils discharges to the Tail Race, which is adjacent to the Lagoons. The water surface in the Tail Race is 4 to 5 feet lower than the bottom in the Lagoons. Bedrock groundwater has been shown to have a higher potentiometric surface, and is rising into the unconsolidated overburden. Hence, the groundwater infiltration from the Lagoons is confined to a shallow, narrow zone less than five feet deep, extending easterly approximately 30 feet to the Tail Race.

Analytical data for chromium and TPH in Appendix D of the RAO report show that the soil contamination in the bottom of Lagoons #1 and #2 decreases with depth (the relatively high concentration material in the top 1.5 inches of Lagoon #1 has been removed).

1. Soil from the top 0.5 inches of Lagoon #1, manually scraped and drummed, designated Area #4
   Chromium: 1300 and 920 mg/kg TPH: 5100 and 6000 mg/kg

2. Soil from the next 1 inch of Lagoon #1, manually removed from the surface of the Lagoon, designated Area #5
   Chromium: 1100 mg/kg TPH: <25 mg/kg

3. Soil from Lagoon #1, mixed from surface to 3 foot depth (after the top 1.5 inches was removed)
   Chromium: 160, 64, 49 mg/kg TPH: 350, 940, 300 mg/kg

4. Soil from Lagoon #2, surficial
   Chromium: 37, 540, 58 mg/kg TPH: 92, 1400, 190 mg/kg

5. Soil from Lagoon #2, 3 foot depth
   Chromium: 15, 11, 43 mg/kg TPH: 60, 27, 540 mg/kg

Note: Two site specific background samples were analyzed for TPH in 1995, and reported in the 1996 Release Abatement Measure Plan. A sample of top soil uphill and west of the Lagoons contained 250 mg/kg TPH and a sample from the edge of Bush Pond, upstream of the plant contained 440 mg/kg. This indicates that leaf litter and organic soils can contribute to TPH. Lagoons #1 and #2 subsoils include some organic-peaty soils, and hence, the TPH in these Lagoons may be biased high by naturally occurring plant waxes. By example, Appendix G to the RAO report shows the Aliphatic C19-C-36 EPH fraction, which includes the plant wax group, was the dominant EPH fraction.

2. Why was no further sampling of PCB conducted at the site?

There was no reason to believe that PCB contamination would be present at the site, based on the type of manufacturing operations and support systems. Nevertheless, CDM collected and analyzed a few samples for PCB, as a normal procedure in evaluating old industrial sites. These samples were collected in areas most likely to indicated whether PCB contamination might exist on the site.

The PIP Group refers to samples collected in 1992 from the Carbonizer Lagoon and Carbonizer Trench, as reported in Appendix C of the RAO report:

1. Sample 2 (Lab # 92-01609) from the Carbonizer Lagoon was reported to contain 0.29 mg/kg and 0.39 mg/kg Aroclors 1254 and 1260, respectively, and less than the reporting limit of 0.048 mg/kg for other Aroclors.
2. Sample 3 (Lab # 92-01610) from the Carbonizer Lagoon Trench contained less than the 0.24 mg/kg reporting limit of all Aroclors.

Quality control spikes for the surrogate decachlorobiphenyl, to test for matrix interference in these samples, produced recoveries of 6,400 and 3,100 percent for Samples 2 and 3, respectively. Hence, the concentrations of the reported Aroclors are likely overstated. Even if these concentrations were real, the PCB concentrations would be less than 1 mg/kg clean up goal set for other sites in Massachusetts, such as the Housatonic River in Pittsfield.

Additional samples for PCB analyses were collected from other locations on the site in October 1995. The analytical results were presented in the 1996 Release Abatement Measure Plan:

1. The drums containing soil from Areas 4 and 7 contained less than the detection limit of 1.8 mg/kg.
2. Soil from Test Pit TP-6 in the "Fire Pit" Area #12, which is within the larger Area #10, contained less than the detection limit of 0.081 mg/kg.
3. Soil from Test Pit TP-21 in Lagoon #1 contained less than the detection limit of 0.075 mg/kg.

Based on the above results, CDM cannot recommend further PCB sampling and analysis in the area of the Buckley & Mann Inc. site subject to the RAO.

3. Why was no sampling conducted following individual phases of excavation to confirm that all material with concentrations exceeding standards had been removed?

Soil samples were analyzed for Areas 3, 5, 6 after contaminated soils were removed. Soil samples were also analyzed for the south end of Area #10, outside the cap. The remaining soils met MCP S-1 Method 1 Standards, as shown in Appendix F of the RAO report.

The soil from Test Pit 10 had a distinct, orange-brown rust color, and the extent of this contaminated soil was easily determined by visual examination. Hence, no analytical confirmation was necessary. Photographs presented at the October 23, 2001 public meeting showed this material when it was stockpiled on-and-under plastic, pending off site disposal.

The slightly contaminated soil in the landfill was adequately characterized in the site investigation phase of the work. Native soil was encountered under the landfill area during the 1998 remediation work. Consequently, there was no need for further characterization data.

4. What is the average depth to groundwater in the area of former landfill Area #10? What if any evaluation was conducted to determine the potential for groundwater infiltration into the consolidated materials, and the consequent leaching to groundwater?

Prior to the 1998 remediation, the depth to groundwater ranged from 2 feet below ground surface in the south end of Area #10, to 8 feet below ground surface in the areas with the highest piles. Under high groundwater conditions, the depth to groundwater in the south end of Area #10 could be less than one foot. Some of the landfill was below the groundwater table, and the rest was just above the groundwater table. The landfill had been available to leach to groundwater for more than 35 years. Monitoring well sampling and analyses in 1986 and 1998 found no groundwater contamination in the area.

5. Why was no barrier material placed beneath the consolidated material to prevent potential downward migration of contaminants over time?

The excavation and inspection of Area #10 confirmed that there were no drums, containers or other potential sources of time-release contaminants present. Consequently, future conditions will be the same as past conditions. The landfill material had been available to leach to groundwater for more than 35 years. Monitoring well sampling and analyses in 1986 and 1998 found no groundwater contamination in the area. Consequently, there is no need for a barrier under the material in the landfill.

6. Why was only one round of groundwater sampling conducted at the site?

Two rounds of sampling were conducted in and/or near the Area #10 landfill, the Carbonizer Lagoon and Lagoons #1 and #2, in 1986 and 1998. Two additional rounds of groundwater sampling were completed for groundwater in Lagoons #1 and #2 in 2000.

The PIP Group also notes that some samples reported in Appendix E to the RAO report were extracted for analysis past the 7-day holding period. These samples were refrigerated at the laboratory, and were extracted on day 8. One extra day holding time under these conditions would not result in significant under-reporting of the slowly degradable PAH compounds analyzed in these samples. PAH concentrations in these samples were all less than the reporting limits of 0.3 to 0.69 ug/L, depending on the specific compound.

7. Given the location of the Tail Race and the Mill River near areas of known contamination and within 200 feet of wells with OHM, why were no surface water and sediment samples collected from either the Tail Race or the River to evaluate potential impacts?

Lagoons #1 and #2 and the Carbonizer Lagoon have no surface water connection to the Tail Race or the Mill River. Area #10 was stabilized by vegetation prior to the 1998 remediation, and since

remediation, has been protected by three feet of clean soil and replanted. Consequently, there was no potential for erosion from these areas to reach the Tail Race or the Mill River.

There was no visual evidence, such as color from residual dye, that Lagoons #1 and #2 had any impact on the Tail Race, even when the Lagoons were still receiving wastewater prior to 1986. The analyses in Table 1 with this response to comments, collected as part of Buckley & Mann Inc.'s voluntary self-monitoring program, were reported to the Division of Water Pollution control in May 1985. Table 1 also includes analytical results for samples collected by the Division of Water Pollution Control in 1985. These data, which were not included in the 2001 RAO report, show that Lagoons #1 and #2 (active at that time) had no significant impact on the Tail Race.

A surface water sample was analyzed in 1986 from the Tail Race just down stream of the factory area. This sample location was selected to determine whether there might be an undocumented release from the factory area infiltrating the penstock discharging to the Tail Race, which is the lowest conduit down gradient of the factory area. This surface water sample was not contaminated.

A surface water sample was also collected in 1986 downstream of the manufacturing area, at the confluence of the Tail Race and the Mill River. This location was included at the request of the Massachusetts Division of Water Pollution Control, to evaluate the overall impact of the site on the River. This surface water sample was not contaminated.

The absence of groundwater contamination in monitoring wells in the Area #10 landfill and near the Carbonizer Lagoon indicate that there was no potential for pollutant migration from these areas to the Mill River or the Tail Race.

Considering the above, there was no evidence to suspect that contamination would be found in the Tail Race or Mill River surface water or sediments related to activities at Buckley & Mann Inc.

8. How does the RAM Plan, as implemented, vary from on-site storage of Remediation Waste, with reference to 310 CMR 40.0032?

The cited regulation applies to contaminated media stockpiled for off site disposal or further remedial actions. The procedure was followed for the Test Pit 10 material from Area #10, as shown in the photographs presented at the October 23, 2001 public meeting.

The cited regulation does not apply to the soil retained on site in Area #10, which had resided in that location for over 35 years, and the relatively small volume of soil consolidated from Areas #3 through 7 to Area #10. These soils are subject to the AUL.

2.0 RISK CHARACTERIZATION

9. It is further assumed, based on a statement in Appendix B, that S-2 Standards are being applied to Area #10 following the installation of clean cover material, and that S-1 Standards apply to the rest of the site.

The three feet of clean cover soil placed over the consolidation area in Area #10 meets S-1 Standards. Soil at a depth below 3 feet is classified S-2, but access is restricted under the Activity and Use Limitation.

2.2 REVIEWER QUESTIONS AND COMMENTS RE: THE RISK ASSESSMENT

10. Why would the S-2 Standards apply in the consolidated landfill area following the implementation of the AUL?

The top three feet of soil in the consolidation area in Area #10 is S-1, and the soils meets the S-1 Standards. The S-2 Standards would apply to the soil below 3 feet, and as such, access to this soil is physically restricted by the geotextile and also restricted under the Activity and Use Limitation. Refer to Response 15 below for further discussion on this subject.

11. Given the wetlands nature the site, and the known presence of aquatic life such as frogs in Lagoon #2 (Appendix B), why were no environmental receptors identified…?

Refer to Response 13.

12. Why was none of the data from any of the lagoons, including the Carbonizer Lagoon, compared to sediment benchmarks?

Refer to Response 13.

13. Why was a Method 3 risk characterization not performed for the site?

The comment continues, "There are several situations in which a Method 1 may not be used, and a Method 3 risk characterization is required by the MCP. Section 310 CMR 40.0971 of the MCP states that if contamination is present in one or more environmental media other than soil or groundwater, Method 1 alone shall not be used. Sediments and surface water both meet the definition of other media, so at this site, the presence of sediments as described above, as well as the presence of contaminants in surface water as stated in Section 6 of the report, would require the use of a Method 3. Also, Section 310 CMR 40.0942 of the MCP requires that a Method 3 be conducted if environmental receptors have been identified for a site, and if OHM known to bioaccumulate are present within 2 feet of the ground surface, as is the case with the lagoons."

A Method 1 human health risk characterization combined with a Method 3, Stage I environmental screening ecological Risk Characterization is appropriate for this site. According to DEP's Guidance for Disposal Site Risk Characterization, "the combination Method 1/Method 3 Risk Characterization is an option at sites where the contamination is not limited to soil or groundwater, but the exposure to humans comes predominately from those media". This combination approach was written into the regulations so that sites with minor sediment or surface water contamination could benefit from using the Method 1 standards to evaluate soil and groundwater while still adequately evaluating the potential environmental risks by Method 3.

Groundwater and soil, including the Carbonizer Lagoon and Lagoons #1 and #2, meet MCP Method 1 Standards, as described in the RAO and in this compilation of responses.

The RAO report does not document a comprehensive Method 3 Environmental Risk Characterization for the site. CDM considered the following evidence prior to preparing the RAO report:

- The absence of any overt evidence of contamination or potential for future release from past operations on the site. There are no current operations.

- The healthy vegetation in the Carbonizer Lagoon, developed over the last 35 years.
- The healthy vegetation in Lagoons #1 and #2, which developed after the Lagoons were removed from wastewater treatment service in 1986.
- The concentrations of the contaminants. Few contaminants exceed the sediment "Screening Levels", and the concentrations of these contaminants are only marginally above the "Screening Levels".
- The potential for significant damage to the Carbonizer Lagoon wetlands from a remediation effort, for minimal environmental improvement.

CDM concluded, in Sections 10 of the RAO report, that there would be no significant environmental benefit from further remediation in the wetlands.

In preparation for the public meeting, CDM revisited the site to further assess the condition of the vegetation in the wetland areas. The memorandum attached with this comment letter describes the condition of these areas, and concludes that there is no indication of adverse impact on the plant ecology from any residual contamination, essentially completing the Method 3, Stage 1 environmental screening.

The "contamination in surface water" comment in the PIP Group question is not applicable any recent condition at the Buckley & Mann Inc. Section 6 of the RAO report refers to contaminated "surface water" in former wastewater treatment Lagoons #1 and #2 when the Lagoons were in active service during and prior to 1986. Wastewater treatment lagoons in active service are not "surface waters" under the MCP. Residual contaminants biodegraded shortly after wastewater discharges ceased in 1986.

3.1 REVIEWER QUESTIONS AND COMMENTS RE: RAO AND AUL AT THE SITE

14. Since the contaminated soil in Area #10 has not been placed on any kind of impermeable layer, the vertical extent of the contamination in the landfill area has not been defined and the concentrations exceeding applicable standards have been left in place, how have the minimum requirements of the RAO been met?

The Area #10 material has been in place for over 35 years. The residual PAH and metal contaminants are at low concentrations and unlikely to migrate. Indeed, no groundwater contamination has been found in monitoring wells installed through and adjacent to Area #10. There is no requirement in the MCP for such material as that found in Area #10 to be placed on an impermeable layer.

The 310 CMR 40.0036 to a "base of impermeable material" refers to temporary stockpiling of remediation waste pending off site disposal, and this procedure was followed for the Test Pit 10 material. The intent of the regulation is to prevent migration or leaching of contaminated soil pending off site disposal. The regulation is not applicable to the material retained in the Area #10 consolidation area.

The assertion that the vertical extent of the contamination in the landfill has not been defined in incorrect. This claim was taken out of context, from a description of the 1995 test pit program. During remediation in 1998, the Area #10 was excavated and inspected to native soils, between approximately 2 and 8 feet below grade. Photographs presented at the October 23, 2001 public meeting showed the excavations.

15. How could an AUL be implemented at the site when soil concentrations exceed applicable Method 1 standards?

A risk characterization can be conducted at any stage of the MCP process- either as a baseline assessment before remediation or following remediation. At this site, a Method 1 risk characterization was conducted following remediation, after the contaminated soils were covered with a cap.

The approach used in this project for Area #10 provides four levels of protection:

1. As described in Section 6 of the RAO report, samples analyzed in the 1995 characterization study for Area #10 were selected to be *biased high*. Samples were taken only from test pits with visible debris and from within these pits, only from elevations which visually contained debris. No samples were taken from test pits free of visible debris or contamination.
2. Area #10 was thoroughly excavated and inspected during the 1998 remediation, to determine whether drums or other undocumented materials might be present. The work showed that the fill material was well characterized by the test pits. (Only two drums were found- one with sodium bicarbonate and one with a water-insoluble glassy flake plasticizer. Both were removed for off site disposal.)
3. A geotextile was placed over the consolidated material as a warning/identification layer, and three feet of clean soil were installed on top of the material.
4. An AUL was recorded, to restrict future excavation in Area #10.

Although the soils under the cap exceed applicable Method 1 Standards, the presence of the cap and the AUL preclude any further exposure to contaminated soil. This approach to site closure under the MCP has been used at landfills and sites with contaminated urban fill (with PAH and metals concentrations higher than at Buckley & Mann Inc.) converted to playing fields elsewhere in Massachusetts with similar cover and AUL restrictions. Contaminant concentrations in the soils outside of the cap are well below Method 1 soil standards. Therefore, a condition of No Significant Risk exists for Area #10. The purpose of the AUL is to maintain a condition of No Significant Risk by identifying and prohibiting any activities (such as excavation) that could potentially damage the cap.

The question also refers to whether the imposition of an AUL requires a Method 3 risk assessment, rather than a Method 1 risk assessment. This question is addressed in the next response.

Further information provided by DEP in their February 1995 Q&A indicates that it is not possible to leave contaminated soil which exceeds Method 1 or Method 2 standards without using a Method 3 approach, which evaluates site-specific risk exposures.

This question asks whether the conclusion of No Significant Risk for Area #10 requires a Method 3 site specific Risk Assessment, rather than a Method 1 Risk Assessment, because soil below the three foot clean cover for the Area #10 consolidation area exceeds S-1 and S-2 Method 1 Standards for four PAH compounds and the S-1 (but not the S-2) Standard for lead. The four PAH compounds, in the high-biased samples (see above) averaged 1.79 to 3.99 mg/kg, relative to Method 1 Standards of 0.7 mg/kg for S-1 soil and 0.7 to 1.0 mg/kg for S-2 soil. Lead averaged 501 mg/kg in these same samples.

A Method 3 Risk Assessment for Area #10 would certainly be a more robust approach than Method 1. But, such an assessment would reach the same conclusion, that there is No Significant Risk, considering that:

1. The compounds have low water solubility, and groundwater analyses have shown no contamination.
2. The three feet of clean cover, geotextile warning layer and AUL eliminate the exposure pathway for direct contact or dust inhalation of the contaminated soil, except for future utility work, which would require a soil management plan under the terms of the AUL for any soil excavations below the cap.

As described by CDM in the October 23, 2001 public meeting, Paul Locke (DEP Office of Research and Standards) published draft revisions to the Method 1 Standards in September 2001. While the draft changes are not yet in effect, and may change, the methodology used to generate the revisions could be applied to the four PAH compounds in question at Buckley & Mann Inc. Locke's draft would raise the S-1 Standards above the concentration found at Buckley & Mann Inc. Hence, a Method 3 Risk Assessment for these compounds, using the same methodology, would show that these compounds posed No Significant Risk (even without an AUL).

PUBLIC INVOLVEMENT PLAN GROUP COMMENTS AND QUESTIONS DATED NOVEMBER 7, 2001

16. At the public hearing, CDM stated that surface water sampling requirements applicable ....had been met... What additional sediment or surface water sampling has been conducted to meet MCP requirements for assessment and risk characterization of the Tail Race and Mill River?

Water quality in the Tail Race was monitored from 1979 to 1985, when Lagoons #1 and #2 were still in service, as described in Response 7 and Table 1. There was no significant adverse impact on Tail Race water quality, based on indicator pollutants.

The groundwater samples collected from the Lagoons in 2000 showed that the residual PAH contaminants in the Lagoon bottom soils are adsorbed on the soil and that the groundwater in the Lagoons meets MCP GW-1 (and GW-3) Standards. Neither the Tail Race nor the Mill River received direct discharge of wastewater from manufacturing operations at Buckley & Mann Inc. The wastewater was subject to treatment in the Carbonizer Lagoon (until operations ceased in 1965) and Lagoons #1 and #2 (until operations ceased in 1986) prior to filtration through the berms surrounding these manmade impoundments.

Consequently, there was no technical justification for additional surface water sampling or sediment sampling in the Tail Race or Mill River.

17. At the Public Hearing, CDM indicated that no Method 3 was conducted because of the visible presence of unstressed vegetation. However, the Public Hearing did not explain why no Method 3 was conducted despite the documented presence of a sheen in the Tail Race, the known presence of OHM related to the site in the lagoons, and the known presence of environmental receptors at the site. Please clarify the MCP exemption used to avoid a Method 3 despite these mandatory triggers.

CDM personnel have no recollection of an oil sheen in Lagoons #1 or #2 during their operation as wastewater treatment Lagoons prior to 1986, in the Tail Race during that period, or subsequently.

Refer to Response 13 for additional comments on subject of a Method 3 Risk Characterization.

18. At the Public Hearing, CDM suggested that the PCB levels found in sediments were not of concern despite exceeding DEP-recommended benchmark levels, because they [PCB at Buckley & Mann Inc.] were below PCB cleanup standards established for other sites. How can use of PCB cleanup standards that were developed for other sites be justified without performing a site-specific evaluation of the receptors, concentrations and potential risk (i.e. a Method 3) at Buckley & Mann Inc.? What about the metals and PAH concentrations in the lagoons that also exceed sediment benchmarks?

The PCB concentrations reported are suspected of high bias, as described in Response 2 above; "Quality control spikes for the surrogate decachlorobiphenyl to test for matrix interference in these samples produced recoveries of 6,400 and 3,100 percent for Samples 2 and 3, respectively. Hence, the concentrations of the reported Aroclors are likely overstated. Even if these concentrations were real, the PCB concentrations would be less than clean up 1 mg/kg clean up goal set for other sites in Massachusetts, such as the Housatonic River in Pittsfield." CDM notes that the PCB (if actually present) reported for the sediment at Buckley & Mann Inc. is in an

isolated wetland not directly connected to the Mill River or Tail Race, and hence, not subject to erosion and migration. A Method 3 Risk Characterization and Risk Management plan would be unlikely to require cleanup standards more stringent than those set for the Housatonic River.

With regard to the metals and PAH compounds, please refer to Response 13.

19. At the Public Hearing, CDM suggested that PIP concerns about the lack of delineation of vertical extent of contamination had been taken out of context. Please describe the vertical extent of contamination in (a) the landfill area and (b) the lagoons, with specific references to the analytical data used to determine this extent.

For the landfill area, please refer to Response 1. There was a visible difference between the fill material and the underlying native soils. No analytical testing was required to make this distinction. Furthermore, contaminants are immobile and the concentrations in the fill are relatively low.

For Lagoons #1 and #2, please refer to Response 1. Most of the contamination in Lagoon #1 was in the top 1.5 inches. This layer was removed with hand tools in 1988, and the material was subsequently designated Area #4 and Area #5. The remaining contamination in Lagoon #2 decreases with depth, as summarized in Response 1.

For the Carbonizer Lagoon, metals concentrations decrease with depth. The two samples reported in Appendix C of the RAO report were taken at 0 to 6 inches (SS-5) and 6 to 12 inches (SS-5A) below the surface. The original laboratory report was in included with the 1986 "Report on an Environmental Site Assessment at Buckley & Mann Inc." The data show a rapid decrease in metals concentrations with depth:

	Top 6 inches	Next 6 inches
Chromium	450 mg/kg	62 mg/kg
Lead	670 mg/kg	73 mg/kg
Zinc	920 mg/kg	260 mg/kg

19. At the Public Hearing, CDM reiterated on more than one occasion that a Method 2 Risk Characterization had been completed for methylnaphthalene and naphthalene compounds that exceeded applicable standards in the Lagoon(s). Please provide the original dated text for this Method 2 Risk Characterization.

The following clarifies the use of a Method 2 Risk Characterization for the residual compounds in Lagoons #1 and #2, as explained in Section 9 of the RAO. CDM may have mis-spoke at the October 23, 2001 Public Hearing, confusing how the naphthalenes and biphenyl were handled under the Risk Characterization.

Soil concentrations of methylnaphthalene and naphthalene in Lagoons #1 and #2 did not exceed S-1/GW-1 standards, and the concentration of these compounds in clarified groundwater did not exceed GW-1 (or GW-3) Standards. Consequently, there was no need for a Method 2 Risk Characterization for these compounds.

Soil concentrations of biphenyl in Lagoons #1 and #2 slightly exceeded S-1/GW-1 standards, but the concentration of these compounds in clarified groundwater did not exceed GW-1 (or GW-3) Standards. Hence, a Method 2 approach was used to show that under site specific conditions, measured in actual groundwater samples from the source area, leaching to concentrations greater

than the Standard did not occur. Concentrations of biphenyl were well below the Method 2 limit for direct contact.

20. At the Public Hearing, CDM suggested that exceeding the MCP S-1 and S-2 standards for PAHs was not a concern because the standards were due to be revised……

CDM said at the Public Hearing that the draft revisions to the Method 1 Standards could *not* be used directly. CDM referenced comments by Paul Locke, DEP Office of Research and Standards, who said that the methodology used to develop the draft Standards could be used, and that under a Method 3 Risk Characterization, the same or similar conclusions could be reached. CDM noted that the concentrations in the Area #10 samples were less than the draft Standards, and that hence, a simple Method 3 Risk Characterization would show No Significant Risk in Area #10. Furthermore, such a Risk Characterization, might obviate the need for an Activity and Use Limitation in Area #10.

21. Please explain how the use of an AUL despite exceeding applicable standards is legally valid. At the Public Hearing, CDM declined to address the legal requirements established by the MCP that must be met by a PRP…….

These questions and assertions repeat questions listed above. Refer the to appropriate responses.

TABLE 1
SURFACE WATER QUALITY DATA
BUCKLEY & MANN INC.

Sample Date	Location	CDM Lab #	pH	Chloride mg/L	COD mg/L	BOD mg/L	Total solids mg/L	Total volatile solids mg/L
Samples analyzed by CDM for Buckley & Mann Inc.								
11-Aug-77	Bush Pond	2472	7.1	32	11			
11-Aug-77	Tail Race, downstream of Lagoon	2473	6.45	35	15			
21-Sep-77	Bush Pond	2622	6.6	30	7	<1		
21-Sep-77	Tail Race, downstream of Lagoon	2624	6.35	39	7	2		
11-Sep-79	Bush Pond	5273	7.14	26	25	<10		
11-Sep-79	Tail Race, downstream of Lagoons	5274	6.54	22	<10	10		
Samples analyzed by the MA Division of Water Pollution Control								
28-May-85	Bush Pond		6.0		36		124	32
28-May-85	Tail Race, downstream of Lagoon		6.4		36		132	14

Note: Lagoon #2 was constructed in 1978 to supplement Lagoon #1.

CDM

Memorandum

To: *Robert Dangel, LSP*

From: *Dwight Dunk, Professional Wetland Scientist*

Date: *October 22, 2001*

Subject: *Buckley and Mann Property, Norfolk, MA*

This field completion memorandum summarizes today's qualitative plant community assessment completed at the Buckley and Mann property in Norfolk, Massachusetts. The attached Figure 4 from the RAO presents the areas evaluated during the site visit. The purpose of the site visit was to assess the plant communities in the following locations identified on the attached figure; Lagoon #1, Lagoon #2, Wetland (north of Lagoon #2), Lagoon #3 and the Carbonizer Lagoon. These locations support various types of wetland plant communities.

First, a brief discussion of wetland plant ecology. All plants would "prefer" to live in ideal conditions; defined as areas with well drain soils, soils with neutral pH, loamy soils (soils with equal percentages of silt, clay and sand particles) and sufficient irrigation. Not all environments present preferred conditions and therefore plants compete with each other for these preferred conditions. A wetland area is a very harsh or stressed environment; poorly drain soils, acidic soil conditions, tight soils (high fractions of silt and clay particles) and excess water. The plants found in wetlands have adapted to these harsh conditions, but would "prefer" to live in upland conditions. Wetland plants are usually out-competed from upland areas and upland plants have not adapted to the harsh wetland conditions. Hydrology is the primary factor controlling the plant community type in a wetland. Extremely wet conditions typically defined the plant community. In the northeastern United States, wetter areas usually support marshes, drier wetland communities can support a forested wetland, and a variety of community types may exist between these two extremes.

The wetland areas observed today are described below.

Lagoon #1

This wastewater lagoon was used to treat industrial wastewater while the Buckley and Mann company was in operation. This lagoon was in service until 1986 and contained permanent standing water when it was in use.

During the site assessment, soils in this lagoon were saturated to the surface. Test pits within the lagoon indicate that the groundwater was about one foot below the soil surface on October 22, 2001, after a period with below normal rainfall. The soils in the floor of this man-made lagoon are sandy. Clean sand is present in the top six to eight inches and black sand with a faint oil odor is present below the clean sand.

The plant community present in the lagoon is young, developing after the cessation of use as a treatment lagoon. The community is emergent and includes sedges (*Scirpus cyperinus, Carex* sp.), soft rush (*Juncus effuses*), grasses and moss. This plant community suggests that the lagoon contains standing for the majority of the growing season. Small areas of exposed soil were observed in the lowest elevation of the lagoon, where standing water remains except during prolonged dry periods. Observations by other CDM employees report standing water well into the summer months with standing water observed year round in some years. The stress of the extremely wet conditions and variable wet conditions limit the structural and species diversity present in this lagoon.

Wildlife signs observed in this lagoon include numerous mammal tracks, deer, raccoon and canine tracks (dog or coyote) and water insects within the pool present in the lagoon.

***Lagoon* #2**
This lagoon was also used to treat industrial wastewater from 1978 to 1986. The plant community is also emergent, and includes sedges, rushes, grasses, a small patch of cat-tails and mosses. The lowest portion of the lagoon contains exposed soils, too. The soils within this lagoon are sandy soils and groundwater was about one foot below the surface at the lower, north end of the Lagoon on October 22, 2001. Aquatic insects and bullfrog tadpoles were observed in the north test pit pool in this Lagoon. Again the hydrology determines the plant community and limits the community to emergent species.

Wetland 1 (North of Lagoon 2, on the west side of the Tail Race)
This appears to be a natural wetland and contains deep organic soils (about eight inches of black organic soils above sand). This wetland is also an emergent community with cat-tails, sedges, grasses, rushes, goldenrod and a few shrubs. This wetland expresses greater species and structural diversity than the former wastewater treatment Lagoons #1 and #2. However, the hydrology is the controlling factor and maintains a community dominated by emergent plants.

***Lagoon* #3**
Lagoon #3, constructed in 1978, was not used as a treatment lagoon. Lagoon #3 drains through a shallow ditch to Wetland 1, and hence Lagoon #3 is never flooded. The Lagoon #3 plant community exhibits the greatest species and structural diversity of the four wetlands on the westerly side of the site.

Carbonizer Lagoon

The Carbonizer Lagoon is located on the easterly side of the site. It contains a narrow channel and flow within the channel was observed during the site visit. Pockets of standing water were also observed. Depending on the controlling hydrology, the lagoon contains standing water, emergent vegetation, emergent vegetation with shrubs, and a small island a bog community on the east. A portion of the bog is floating (or quaking) bog. This lagoon contains a well developed wetland community.

Conclusion

The wetland communities within the natural wetlands and former lagoons on the Buckley and Mann site do not appear to be plant communities stressed by chemical contamination. Plants were not stunted nor did they appear to be dead or dying - typical signs for chemically stressed vegetation. The plant diversity appears to be normal for the localized environments. The few areas of exposed soils within the former lagoons are shallow ponding areas that remain wet throughout the entire, or long enough, portions of the growing season to prevent colonization by wetland plants. These pools dry out periodically and thereby prevent the growth of truly aquatic plants.

The former Lagoons #1 and #2 will continue to develop over time into communities with greater species diversity and structural diversity compared to the current conditions. These communities are developing in former lagoons that used to contain standing water at all times. The greatest stressor controlling these communities is the fluctuating hydrologic regime to which the areas are subjected.

Dwight Dunk is a wetland ecologist with over 13 years of consulting experience. He is skilled at wetland resource delineation in freshwater and coastal environments, wetland function and values evaluations, wildlife habitat assessments, wetland replication planning and design, environmental permitting, environmental impact assessment, Massachusetts (MEPA) and National Environmental Policy ACT (NEPA) documentation, development feasibility studies, and environmental planning.

Norfolk
17 Lawrence ST

SCANNED

PUBLIC INVOLVEMENT AND PUBLIC MEETING ANNOUNCEMENT
BUCKLEY & MANN, INC.

On behalf of Stephen and Richard Mann, Camp Dresser & McKee Inc. is pleased to:

- Acknowledge of the receipt of your petition to make the site known as Buckley and Mann Inc. and listed as Bureau of Waste Site Cleanup Release Tracking Number (RTN) 3-0173 a Public Involvement Plan (PIP) site.
- Provide a notice of public meeting to review site conditions and describe the remediation work completed at the site.

The public meeting will be held on Tuesday October 23, 2001 at 7 P.M. in the auditorium at the Freeman Centennial School, Boardman Street, Norfolk. Mr. Robert Markel, Town Administrator, will moderate the meeting. At the meeting, Camp Dresser & McKee Inc. will describe the conditions at the Buckley & Mann Inc. site and what was done to attain a condition of No Significant Risk under the Massachusetts Contingency Plan. The meeting will include a question and answer session.

A legal notice announcing the meeting will be published in the Attleboro Sun Chronicle at least 14 days prior to the meeting. The site investigation documents requested by the petitioners will be available at the Norfolk Conservation Commission Office in the Town Hall and at the Norfolk Public Library by approximately October 1, 2001.

If you wish to submit questions prior to the meeting or request that specific information be provided at the meeting, please call Robert Dangel at 617- 452-6267 or myself at 617-452-6274.

William R. Swanson
Vice President
Camp Dresser & McKee Inc.
50 Hampshire Street
Cambridge, MA 02139

September 19, 2001

CC: Petitioners
S. Mann
K. Stromberg, DEP
R. Markel, Norfolk
M. Simpson, Norfolk Cons. Comm.
J. Spinney, Norfolk Library

CDM Camp Dresser & McKee Inc.

consulting
engineering
construction
operations

One Cambridge Place
50 Hampshire Street
Cambridge, Massachusetts 02139
Tel: 617 452-6000 Fax: 617 452-8000

September 20, 2001

Marie Simpson
Conservation Commission
Town Hall
Norfolk, MA 02056

John Spinney
Reference Librarian
Norfolk Public Library
139 Main Street
Norfolk, MA 02056

Subject: Buckley & Mann, Inc.

Petitioners under the Massachusetts Contingency Plan requested that the enclosed reports, prepared by Camp Dresser & McKee Inc. be made available as part of the Public Involvement Plan for the Buckley & Mann, Inc. site:

Jul 1986	Report on Environmental Site Assessment.
Apr 1992	Summary of Environmental Site Assessment Work and Interim Remedial Measures.
Apr 1996	Site Assessment and Remediation Status Report and Release Abatement Measure Plan Support Document. Also included, the October 1995 analytical data supporting the April 1996 report.
Nov/Dec 1997	Revised Release Abatement Measure (RAM) Plan; Evaluation of Remedial Action Alternatives (Phase III) Report; Tier II Extension Report; Drawings and Draft Specifications for the On-Site Consolidation of Contaminated Soils.
Aug 2001	Response Action Outcome Report, Release Abatement Completion Statement and Activity and Use Limitation.

Please make the documents available to interested parties.

Contact me at (617) 452-6267 if you have any questions.

Very truly yours,

CAMP DRESSER & McKEE INC.

Robert A. Dangel, LSP
Principal Scientist

cc: S. Mann, B&M
K. Stromberg, DEP
C. Elder, Petitioner.

SCANNED

Buckley and Mann, Inc.
15 Bush Pond Road
Norfolk, MA 02056

Attn: Mr. Richard Mann and Mr. Stephen Mann

Massachusetts Department of Environmental Protection
Northeast Regional Office
205 Lowell Street
Wilmington, MA 01887

Attn: Public Involvement Plan Coordinator

Re: Designation of Public Involvement Plan Site
Buckley and Mann, Lawrence Street, Norfolk, Massachusetts
RTN 3-00173

Dear Sir or Madame:

Pursuant to the Massachusetts Contingency Plan (MCP), the list of the following persons by way of the attached signatures are requesting that the listed disposal site known as Buckley and Mann, located on Lawrence Street in Norfolk, Massachusetts be designated a Public Involvement Plan (PIP) Site. This is a formal request to designate the disposal site as a PIP site pursuant to M.G.L. c. 21E, § 14(a) and the Massachusetts Contingency Plan, 310 CMR 40.1404. The site has been assigned a Release Tracking Number (RTN) 3-000173. Currently the site is Tier Classified as a Tier II site. The site has not been numerical ranked as this site was a waivered site prior to the revisions and implementation of the 1993 MCP.

This site and submittal meets the requirements of Public Involvement Plan Site Designation pursuant to 310 CMR 40.1404, whereas (1) Any disposal site that has been classified as either Tier I or Tier II pursuant to 310 CMR 40.0500 shall be eligible for designation as a Public Involvement Plan (PIP) site, and (2) Petitions shall be submitted to the party responsible for conducting the response action at the disposal site. For disposal sites where a RP, PRP or Other Person is conducting the response action, a copy of the petition shall also be sent concurrently to the Department.

Copies of this petition have been sent by certified mail to the PRP and DEP.

This submittal includes, as required by regulation:

- Identity of the disposal site to be designated, by name, address, and Release Tracking Number;
- Request to designate the disposal site as a PIP site pursuant to Massachusetts General Laws and the Massachusetts Contingency Plan,
- Signatures and addresses of at least ten persons signing the petition. These names and addresses shall also be legibly printed so that they can be used to respond to the petition.

Buckley and Mann, Inc.
15 Bush Pond Road
Norfolk, MA 02056

Massachusetts Department of Environmental Protection
Northeast Regional Office
205 Lowell Street
Wilmington, MA 01887

Reasons for Requesting Designation of the Site as a Public Involvement Plan Site

During recent public hearings about the subject disposal site, testimony was presented that the site was "cleaned up." However, a recent Release Abatement Measure Plan Status Report dated March 2001 and submitted to the Norfolk Board of Health, documented that "four groundwater samples from October 2000 were analyzed for [Polynuclear Aromatic Hydrocarbons] PAH....One of the four samples contained 2-methylnapthalene at 16 ug/L [micrograms per liter] in excess of the 10 ug/L MCP GW-1 Method 1 limits." Many of the abutters to the disposal site are concerned that private wells could be impacted by groundwater contaminants. No information has been provided or included in the report which looks at fate and transport, natural attenuation or other routes of exposure related to the known contaminants in the groundwater.

In addition the report calls for "complet[ion] of an Activity and Use Limitation (AUL) and fil[ing a] Release Abatement Measure Completion Report and Response Action Outcome Report." It is the petitioners' understanding that the based upon the DEP policy document, ***GUIDANCE ON IMPLEMENTING ACTIVITY AND USE LIMITATIONS Interim Final Policy #WSC 99-300, May 1999***, "*AULs are primarily required to address human activities and uses of a site that could result in exposure to soil contamination. AULs are specifically required for groundwater in one instance: to restrict the ongoing use of an existing private well for use as a drinking water supply where the GW-1 standards will not be met.*" The owners of the private wells in the area have not been contacted to discuss whether an AUL would be used or considered on adjacent private property because of contaminated groundwater.

Additional concerns of Town of Norfolk residents are due to comments made at a recent Town Meeting that the Town would and may consider this location as a source of public water. The policy cited above states that the *"decision behind the MCP's limits on the use of AULs for groundwater contamination rests on several considerations. First, because contamination in groundwater migrates over time, providing an accurate description of the affected area of groundwater as part of an AUL is problematic as the boundaries can be expected to change. Second, because groundwater migration does not respect property boundaries, AULs for groundwater in many cases would entail obtaining agreement(s) from owners of neighboring properties to restrict access/exposure to contamination in groundwater underlying their properties. Because it is unlikely that parties engaging in cleanups could routinely obtain such agreements, any MCP requirement to do so would be impractical and unachievable. Finally, in the case of ensuring that new private wells are not installed in and are not drawing upon contaminated groundwater, local Boards of Health have the authority to ensure that such supplies are potable. Therefore, the MCP does not need to provide a separate regulatory check on potential exposure to groundwater contamination via new private water supply wells."* By the simple intent of an AUL for groundwater, a municipal supply well would not be permitted when there are exceedances of GW-1 standards.

Buckley and Mann, Inc.
15 Bush Pond Road
Norfolk, MA 02056

Massachusetts Department of Environmental Protection
Northeast Regional Office
205 Lowell Street
Wilmington, MA 01887

Risk of Harm to the Environment

While the petitioners fully understand that an AUL to address risk of harm to the environment is feasible per policy, "[c]*learly, an AUL stating that animals must not use the property, or limiting an animal's use of a property, is not realistic and should not be considered. However, when a remedial action, such as capping to prevent run-off to a wetland, is conducted to prevent risk of harm to the environment, it may be appropriate to include an AUL with the RAO to establish continuing obligations for human activities such as maintenance of the cap and obligations to not interfere with its function.*" An area of the Buckley and Mann site has been capped as part of the response actions and is reportedly the same area of the AUL. The petitioners are requesting information on fate and transport of those chemicals in the capped area that could impact Bush Pond and other water bodies, streams and rivers downstream

Request for Locating the Information Repository

The petitioners request the information repository be established at the Town of Norfolk Library.

On behalf of the Petitioners,

Ramesh Advani
1 Bush Pond Rd.
Norfolk, MA

Catherine A Elder
117 Seekonk St.
Norfolk, MA

Helen P. Cleary
67 Myrtle St.
Norfolk, MA

1st all 3 are key petitioners

We the undersigned request that the, Buckley and Mann, Lawrence Street, Norfolk, Massachusetts 02056 RTN 3-00173 be designated as a Public Involvement Plan Site under the provisions of M.G.L. c. 21E and the Massachusetts Contingency Plan, 310 CMR 40.1400.

Petitioners for Designation of Public Involvement Plan Site

Name (Printed)	Name Signature and Date	Home Address	Telephone Number
CATHERINE A ELDER	Catherine A Elder 7/7/2001	117 Seekonk St Norfolk	508 528 1299
THOMAS M ELDER	Thomas M. Elder 7/7/2001	117 Seekonk St Norfolk MA	508 528 1299
PAUL STUBLE	Paul Stuble 7/7/2001	115 Seekonk St Norfolk, MA	508 528-9570
DONALD L. TOMKINSON	Donald L. Tomkinson 7-7-01	112 SEEKONK ST.	508 528-6403
GRAYNE M. TOMKINSON	Grayne M. Tomkinson 7-7-01	112 Seekonk St.	508-528-6403
~~WILLIAM F ARCHIBALD~~ WILLIAM F ARCHIBALD	7.7.01	127 SEEKONK ST	508-520-4041
WENDY ARCHIBALD	Wendy Archibald 7.7.01	127 SeeKonk St	508-520-4041
Margaret Harlow	7/7/01	113 Seekonk St.	508-528-9570
GRAHAM STERLING	7/9/01	50 FROTT ST	508-528-2336
Judith A. Sterling	Judith A. Sterling 7/9/01	50 Fruit ST.	508-528-2336
GORDON A. STERLING	7/9/01	50 Fruit ST.	508-528-2609
DAVID L. WILDMAN	David L. Wildman 7/8/01	19 PARK ST. NORFOLK MA.	508-541-8219
PAT WILDMAN	Pat Wildman 7/8/01	19 PARK ST. NORFOLK, MA	508 541-8219
Lawrence Mesner	7/8/01	22 Pondview Rd Norfolk, MA	508-528-1091

We the undersigned request that the, Buckley and Mann, Lawrence Street, Norfolk, Massachusetts 02056 RTN 3-00173 be designated as a Public Involvement Plan Site under the provisions of M.G.L. c. 21E and the Massachusetts Contingency Plan, 310 CMR 40.1400.

Petitioners for Designation of Public Involvement Plan Site

Name (Printed)	Name Signature and Date	Home Address	Telephone Number
HELEN P. CLEARY	Helen P. Cleary	67 MYRTLE ST NORFOLK 02056	508-528-3659
ALEXANDER F. MATULEWICZ	Alexander F. Matulewicz 6 July 01	36 FRED NICKSON RD NORFOLK MASS	508-528-0974
CLAYTON J. MORRIS	Clayton J Morris 7/8/01	33 NOON HILL NORFOLK, MASS	508-528-3055
JANE P. MORRIS	Jane P. Morris 7/8/01	33 NOON HILL AVE NORFOLK, MA	508-528-3055

We the undersigned request that the, Buckley and Mann, Lawrence Street, Norfolk, Massachusetts 02056 RTN 3-00173 be designated as a Public Involvement Plan Site under the provisions of M.G.L. c. 21E and the Massachusetts Contingency Plan, 310 CMR 40.1400.

Petitioners for Designation of Public Involvement Plan Site

Name (Printed)	Name Signature and Date	Home Address	Telephone Number
Elizabeth Magner	Elizabeth Magner 7/8/01	22 Pondview Rd.	528-1091
MARYANN T. MAGNER	Maryann T. Magner 7/8/01	22 Pond View Rd	528-1091
GLENN R. BEERNINK	Glenn R. Beerink 7/8/01	7 CHURCHILL RD	528-2448
NORMAN G GENTRY	Norman Gentry 7/8/01	6 MOHEGAN ST	528-1863
Kathleen M Sebring	Kathleen Sebring	18 Park St	528-5589
J DAVID KENNEDY	J David Kennedy 7/10/01	74 GROVE ST	528-7553
NANCY A. SMYTH	Nancy A. Smyth 7/10/01	74 Grove St	528-7553

We the undersigned request that the, Buckley and Mann, Lawrence Street, Norfolk, Massachusetts 02056 RTN 3-00173 be designated as a Public Involvement Plan Site under the provisions of M.G.L. c. 21E and the Massachusetts Contingency Plan, 310 CMR 40.1400.

Petitioners for Designation of Public Involvement Plan Site

Name (Printed)	Name Signature and Date	Home Address	Telephone Number
TESSY MALIKKAL	7/8/01 Tessy Malikkal	1 Ridgefield Rd Norfolk	528-7236
Lisa Van Thiel	7/8/01	15 Longmeadow Norfolk	520-7158
Raphael Maliakl	Raphael Maliakl 7/8/01	1 Ridgefield Rd	528 7236
Kathy Beans	Kathy Beans 7/6/01	9 King St	528-8935
Nancy Quinlisk	Nancy Quinlisk 7/6/01	1 Forest Ln	528-5401
Pamela Moor	Pamela J. Moor 7/8/01	3 Stony Rd.	520-0647

We the undersigned request that the, Buckley and Mann, Lawrence Street, Norfolk, Massachusetts 02056 RTN 3-00173 be designated as a Public Involvement Plan Site under the provisions of M.G.L. c. 21E and the Massachusetts Contingency Plan, 310 CMR 40.1400.

Petitioners for Designation of Public Involvement Plan Site

Name (Printed)	Name Signature and Date	Home Address	Telephone Number
PATRICIA SAINT AUBIN	7-6-01	6 Shady Way NORFOLK MA 02056	508-553-9778.
Ralph Greggs	7/8/01	6 Shady Way	508 553 9778
ROBERT SMITH	7-9-01	9 BARNSTABLE RD	528 8357
Daniel Mason	Daniel R Mason 7/9/01	14 Wave Drive	508-553-8737

We the undersigned request that the, Buckley and Mann, Lawrence Street, Norfolk, Massachusetts 02056 RTN 3-00173 be designated as a Public Involvement Plan Site under the provisions of M.G.L. c. 21E and the Massachusetts Contingency Plan, 310 CMR 40.1400.

Petitioners for Designation of Public Involvement Plan Site

Name (Printed)	Name Signature and Date	Home Address	Telephone Number
Adeline Bee	Adeline Bee 7-9-01	3 Day St Norfolk, MA 02056	508-528-2601
Joseph Ballazzo	Joseph Ballazzo 7/9/01	3 Day St. Norfolk, MA 02056	508-528-2601

Norfolk
17 Lawrence ST
U/A

CDM Camp Dresser & McKee Inc.

consulting
engineering
construction
operations

One Cambridge Place
50 Hampshire Street
Cambridge, Massachusetts 02139
Tel: 617 452-6000 Fax: 617 452-8000

SCANNED

September 14, 2001

Department of Environmental Protection
Bureau of Waste Site Cleanup
Northeast Regional Office
205A Lowell Street
Wilmington, MA 01887

Subject: Buckley & Mann Inc., Bureau of Waste Site Cleanup #3-0173

On behalf of Buckley & Mann, Inc., Camp Dresser & McKee Inc. is pleased to submit the attached copy of the Activity and Use Limitation notice published in classified advertisement section of the Attleboro Sun Chronicle on September 5, 2001.

If you have any questions, please contact me at (617) 452-6267.

Very truly yours,

CAMP DRESSER & McKEE INC.

Robert A. Dangel
Licensed Site Professional

cc: Richard & Stephen Mann

RECEIVED
SEP 17 2001
DEP
NORTHEAST REGIONAL OFFICE

16 Lake Shore Drive
N. Attleboro
Office B-6
M-F, 12-5pm
Or call for Appt.
1 & 2 Bdrms., 1-1.5 baths
no pets please
Across from Stop & Shop
Other Locations in
Foxboro & Plainville

PLAINVILLE - 2 BR. $775-$875 w/w, a/c, lndry, parking, lg. playground, exc. loc, No pet. 617-527-3631, 9-6p.

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Distinction between
Boston & Providence
Town and Country
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71 Messenger St.
(Route 106)
Plainville, Mass.
1 & 2 Bedrooms
1 & 1.5 Baths
Some utilities included
Office next to pool/tennis courts
Mon-Fri. 9-6
Sat. 10-4 • Sun. 12-4
Near Routes I-95, I-495, I-295, 140 & 1
Other locations in Foxboro & N. Attleboro. No pets please

S. ATTLEBORO - Like new redecorated, 2nd flr., 5 rm. Lndry, prkg., appli. $800/mo. 1st/last/sec. ARMELL, (508) 761-7777.

S. ATTLEBORO 2 Rms., 1 st flr., on bus line, all util., quiet, no pets. $575/mo. Call (508) 761-7498

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ATTLEBORO & NO. ATTLEBORO

139 - Condominiums

S. ATTLEBORO - Condo. 4 rm., 1.5 ba., full bsmt., w/d h.u., appl. No pts/smk. Close to 95/T. 508-272-0334.

140 - Townhouses

ATTLEBORO - Beautiful 2 bdrm., 2 bath in exc. loc., w/w, appliances, w/d h.u., private deck. No pets. $1,250/mo. 1st + security. Call: (508) 222-5583

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151 - Broker Listings

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Interest rates for home purchase are LOW. To facilitate the flood of buying opportunities, a new interactive service has been developed to explore your mortgage potential in less than 3 minutes.
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Sherlie DeGirolamo
www.dewolfemansfield.com
THE DEWOLFE COMPANY

400 - Legal Notices

Buckley & Mann Inc.
NOTICE OF AN ACTIVITY AND USE LIMITATION
BUCKLEY & MANN INC.
17 LAWRENCE STREET
NORFOLK, MA 02056
3-0173

Pursuant to the Massachusetts Contingency Plan (310 CMR 40.1073), a Notice of Activity and Use Limitation on the above disposal site has been registered with Norfolk County Land Registration Office.

The Notice of Activity and Use Limitation will limit site activities and uses on a portion of the above property to the following:

A. *In the former landfill area east of the Tail Race:*

•Passive and active recreation.

•Maintenance of grassed areas, planting and seeding up to a depth of three feet below ground surface, installation of fencing with intrusion limited to driving of posts.

•Utility maintenance work either not involving soil excavation or involving soil excavation to a depth of no greater than three feet below ground surface;

•Emergency utility repair work, lasting no longer than eight consecutive hours and involving the excavation of nor more than twenty (20) cubic yards of soil from depths of greater than three feet below ground surface.

•Such other activities or uses which, in the Opinion of the Licensed Site Professional, shall present no greater risk of harm to health, safety, public welfare or the environment than the activities and uses set forth in this Paragraph.

B. *In the former wastewater treatment lagoons west of the Tail Race:*

presented praying that ROBERT DYLAN EMOND of ATTLEBORO in the County of BRISTOL be allowed to change his name as follows:

ROBERT DYLAN EMOND
To
ROBERT RAMOS QUINONES

IF YOU DESIRE TO OBJECT THERETO, YOU OR YOUR ATTORNEY MUST FILE A WRITTEN APPEARANCE IN SAID COURT AT TAUNTON ON OR BEFORE TEN O'CLOCK IN THE FORENOON (10:00 A.M.) ON **September 15, 2001.**

WITNESS,
HON. Elizabeth O'Neill LaStaiti, Esquire, First Justice of said Court, this day, August 8, 2001.
Robert E. Peck
Register of Probate
9:5

September 12th Hearing

TOWN OF WRENTHAM
BOARD OF APPEALS
Public Hearing Notice

Notice is hereby given that in accordance with the provisions of the Wrentham Zoning Bylaw and Chapter 40A, MGL, as amended, a public hearing will be held on September 12, 2001 at 7:30 p.m. in the Community Room, Bennett Gardens, Garden Lane, Wrentham, MA for the following applications:

Mark & Judith Foley for a special permit to erect an 8' x 34' farmer's porch at 134 Lakeside Avenue.

Richard O. Hill for a special permit to erect a deck of approximately 1400 square feet that wraps around three sides of the dwelling and renovate the kitchen at 395 West Street.

visions of Chapter 40A of the Massachusetts General Laws and any and all amendments thereto, a public hearing will be held on September 25, 2001 at 6:30 P.M. in the Conference Room, North Attleborough Town Hall on the following applications:

RICHARD C. BEST for a Variance from Section IV, Intensity Regulations, Schedule A (front & side yard) of the North Attleborough Zoning By-laws to construct a 25 x 38' single family home on the property located at 4 Loomis Street. Further described as Lot Numbers 13, 14, 15 & 16 on the Assessors Plat 41 located in an R-20 Residential District.

STANLEY & BETTY PERKOSKI for a Variance from Section IV, Intensity Regulations Schedule A, of the North Attleborough Zoning By-laws to construct a 10 x 14' storage shed on the property located at 59 Burden Avenue. Further described as lot numbers 438, 439, 440 & 480 on the Assessors Plat Number 34 located in a R-15 Residential District.

RONALD & SHERRELL PREFONTAINE for a Special Permit pursuant to Section V, Use Regulations, Schedule B of the North Attleborough Zoning By-laws to allow a 30 x 14' two story storage shed to be used as a childrens' playroom with bath for possible pool house on the property located at 55 Pleasant Street. Further described as Lot Number 108 & 109 on the Assessors Plat Number 3 located in an R-10 Residential District.

KEVIN J. DEVLIN for a Special Permit pursuant to Section VII, Nonconforming or Existing Uses of the North Attleborough Zoning By-laws to construct 20' x 32.6' addition off the rear of the single family home located at 80 Oak Street. Further de

MORTGAGEE'S NOTICE OF SALE OF REAL ESTATE
Premises: 11 Walnut Street Attleboro, Massachusetts

By virtue and in execution of the Power of Sale contained in a certain mortgage given by **Duane L. McKearney and Linda L. McKearney** to Norwest Mortgage of Massachusetts, Inc. d/b/a Norwest Mortgage dated January 26, 1998 and recorded with Bristol County (Northern District) Registry of Deeds in Book 7456, Page 30, of which mortgage the undersigned is the present holder, for breach of the conditions of said mortgage and for the purpose of foreclosing the same will be sold at Public Auction on the 26th day of September, 2001, A.D. at 10:00 A.M. at or upon the mortgaged premises, **11 Walnut Street, Attleboro, Massachusetts,** as described below, being all and singular the premises described in said mortgage,

To wit:

The land, with any buildings thereon, situated in Attleboro, Bristol County, Commonwealth of Massachusetts, bounded and described as follows:

SOUTHERLY by the northerly line of Walnut Street, ninety (90) feet;

WESTERLY by Lot #31 as shown on plan of land hereinafter mentioned, ninety-four and 2/10 (94.2) feet;

NORTHERLY by Lots #23 and #24 as shown on said plan, ninety (90) feet; and

151 - Broker Listings

WELCOME TO QUAIL CREEK

cashier's check at the time and place of the sale by the purchaser as a deposit. The balance of the purchase price is to be paid in cash, or by certified check, bank cashier's check or bank treasurer's check within 30 days thereafter at the Law Offices of Shapiro & Kreisman, Chiswick Park, 490 Boston Post Road, Sudbury, MA 01776, (978) 443-8800. The description for the premises contained in said mortgage

151 - Broker Listings

AGNES FOUNTAS REALTY

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ATTLEBORO: 13 Units, business opportunity. Call for details.

ATTLEBORO
6,000 sq. ft. of Industrial space for light manufacturing.

ATTLEBORO
$119,900. Owner 1200 sq. ft. of living space. Needs that special buyer who is ready.

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ers, fenced-in backyard, maintenance-free vinyl siding and much more for $174,900. Call 508-226-1515.

OUTSTANDING
Property w/3.3 acres of land. Farmhouse has 7 rms., 3 BRs, 2.5 baths, Florida rm. w/vaulted ceiling and 4 sliders to wrap-around deck! Lots of storage, barn w/showcase, office, 2-car garage, and upper level. Newer 3-car detached garage, large storage shed, holds 4 cars! New 4+ zone FHW heating system. All this and so much more for $470,000. A must see!! Call today 508-226-1515.

COLONIAL
in an adorable neighborhood near Baker's corner. Offers large rooms and high ceilings. 3 large bedrooms, formal living and dining room. Shopping close by! Recently reduced to $155,500. Take a look today. Call 508-226-1515.

THIS IS IT!!
Beautiful 3-bdrm. Cape w/gorgeous addition features a cath. ceiling, skylight, fully enclosed porch w/Vermont woodstove for those cool winter nights. Private backyard w/built-in pool, screened gazebo, cabana, and pretty deck around pool! But wait til you see the beautiful landscaping! A must see! Won't last at $229,900. Call for your private showing today. 508-226-1515.

NORFOLK
1 1/3 Acres, 10+ rooms, workshop, 5-6 bdrms., kitchen with fireplace, formal LR, DR and family room. Great potential! $285,000. Call 508-695-2511.

BE THE FIRST
to step into this pampered 9-room Colonial. Glistening hardwood floors, 2.5 baths, 1st floor master, spacious fireplaced living room with corner hutches. 4-stall garage. $239,900. Call 508-695-2511.

SHAPED RANCH
North Attleboro. Offers plenty of room for the entire family. Eat-in kitchen, 12x30 sunroom, formal dining room, 2.5 baths

3-0173

MEMORANDUM

SCANNED

To: Mr. Robert A. Dangel, LSP, Camp Dresser & McKee
Cc: Ms. Karen Stromberg/DEP-NERO, Mr. William R. Swanson, VP, Camp Dresser & McKee
Cc: Buckley and Mann, Inc.
Cc: Norfolk Board of Selectmen, Norfolk Town Administrator, Norfolk Board of Health, Norfolk Conservation Commission, Norfolk Golf Committee
Cc: National Golf Foundation, Earth Tech (both via Town Administrator)
From: Public Involvement Plan (PIP) petitioners - Buckley and Mann property, Norfolk
Date: October 3, 2001
Re: August 2001 Class A-3 Response Action Outcome and Release Abatement Measure Completion Report, Buckley and Mann, Inc., Norfolk, MA

This document has been prepared by members of the Public Involvement Plan (PIP) group for the Buckley and Mann site in Norfolk, MA, in preparation for the October 23, 2001 public hearing. Following our review of the RAO, we have assembled a list of questions regarding the work done to date. For your convenience, we are making this list available in advance of the meeting, and we would appreciate a written list of responses.

The document is structured as follows: Section 1 addresses site assessment and remediation activities; Section 2 describes the risk characterization conducted at the site; and Section 3 discusses the Activity and Use Limitation implemented prior to filing the Response Action Outcome.

1.0 SITE ASSESSMENT AND REMEDIATION ACTIVITIES

1.1 Areas Included in the Response Action Outcome (RAO)

The following section describes the portions of the site that have been investigated and included within the Response Action Outcome.

As described in the report, work to date has been limited to approximately 12 acres of the 143-acre property. These 12 acres, which comprise the extent of the disposal site covered by the Response Action Outcome (RAO), include a 2-acre former on-site landfill; three lagoons, each approximately 1 acre in extent; and seven acres of adjacent land located between the Tail Race (which is a manmade brook) and the Mill River. Within this area, the following were identified as areas of concern during site investigation activities:

- Area #1 - material at the bottom of Lagoon #1
- Area #2 - material at the bottom of Lagoon #1
- Areas #3, 4, and 5 - material excavated from Lagoon #1 in 1975 and 1988
- Area #6 - material excavated from the former dyehouse trench to Lagoon #1

- Area #7 - material collected in 1986 from a small pit where wooden drum(s) with dye paste were buried
- Area #8 - the pit from which wooden drum(s) with dye paste were excavated (a small area within Area 10)
- Areas #9, 10, and 11 - the carbonizer lagoon; carbonizer spoils and old building demolition debris; and the trench to the carbonizer lagoon, respectively. (Note: As described in the report, carbonizing was a process used to reclaim wool from used garments. The raw material was conveyed through acid vapor, which charred the cotton threads on the seams and fasteners and facilitated separation of the wool. The wool was neutralized, rinsed, and reused. The solid residue, consisting of fiber and fasteners, was discarded on site in Area #10, and wastewater was discharged through the carbonizer trench (Area #11) to the carbonizer lagoon (Area #9).
- Area #12 - fire pit (a small area within Area #10).

[Note: Investigations to date have not included the area of the dyehouse, which was operating until 1986 and which discharged effluent to the lagoons; any of the other on-site factory buildings; or the diesel and fuel oil underground storage tanks that were removed between 1986 and 1993. The reviewers understand that these areas were not included in CDM's scope of work, and they are listed in order to inform town officials and other readers of this document of the limitations of the workscope and areas of potential future concern.

1.2 Summary of Site Investigation Activities

Initial site investigation activities were conducted in 1986, and were followed by sampling around the carbonizer lagoon in 1992. Further assessment was conducted in 1995, when 28 pits were dug at the site. Solid samples were collected from 21 of these pits: 3 samples from Area #1, 6 samples from Area #2, 1 sample each from Areas #3, #5, and #6, 2 samples from Area #4, 6 samples from the 2-acre Area #10, and 1 sample from Area #12 (Appendix A, Table A-1). The material in the pits was consistent with the property usage as a textile mill, and included coal ash, building debris, fasteners (buttons, zippers, etc), and textile machinery.

The results of the assessments, as described in the RAO document, are summarized below.

- The following compounds were present in solid samples collected from the bottoms of wastewater Lagoons 1 and 2 (Areas #1 and #2) between 1986 and 2000: trace Volatile Organic Compounds (VOCs), lead, chromium, total petroleum hydrocarbons, 1,1-biphenyl (representative of dye carrier compounds), and PAHs. Although the analytical results were not presented in the RAO, Section 6.0 of the RAO stated that traces of dye carrier volatile hydrocarbons were present in dyehouse wastewater and Lagoon #1 surface water prior to and in 1986. According to Appendix A of the RAO report, it was concluded following the 1986 investigation that there was groundwater contamination (as represented by Chemical Oxygen Demand) under Lagoons 1 and 2 and the adjacent 30-foot-wide earthen bank separating the lagoons from the Tail Race.

- Soil samples from Areas #3, #4, #5, and #6, all of which represented materials removed from the bottom of Lagoon #1 or the trench between the dyehouse and the lagoon, had one or more of the following compounds: lead, chromium, total petroleum hydrocarbons, and certain Polynuclear Aromatic Hydrocarbon (PAH) compounds.

- At least two solid samples were collected from the carbonizer lagoon area in 1988, and were found to have metals including lead and chromium. Two additional samples were collected in 1992, from the edge of the carbonizer lagoon and from the trench to the carbonizer lagoon; these samples were reported to have metals, total petroleum hydrocarbons, and polychlorinated biphenyl compounds (PCBs). In addition, a sample of carbonizer washtub discharge (with buttons, buckles, zippers, and fibers) and a sample (with old brick, glass, and rubbish) from a disposal area near the carbonizer that was periodically burned were also analyzed in 1992; these areas are reported to have been consolidated into Area 10.

- The following compounds were detected in soil samples from landfill Area #10: lead, chromium, total petroleum hydrocarbons, and certain Polynuclear Aromatic Hydrocarbon (PAH) compounds.

1.3 Remediation Activities

As described in Section 7 of the RAO, a Release Abatement Measure (RAM) Plan was implemented between 1998 and 1999 to reduce the risk posed by soil at the site.

In brief, the material in Area #10, part of which falls within a wetland buffer zone, was excavated. The material was sorted to remove debris such as concrete, lumber, machinery, building debris, and other solid (non-hazardous) waste, which was stockpiled for future disposal (according to the RAO, this will be conducted at the time of building demolition). Approximately 315 cubic yards of material from test pit #10, which was known to have high levels of chromium and lead, were shipped off site for disposal.

The rest of the excavated material from Area #10, plus materials from Areas #3 through #8 and Area #12, were visually inspected and were then consolidated at the former location of Area #10. The consolidated material was graded and covered with a geotextile fabric, followed by 3 feet of clean sand cover. This area is subject to an Activity and Use Limitation (deed restriction).

1.4 Reviewer Questions and Comments re: Site Investigation and Remediation Activities

Has the vertical extent of contamination in the soil been delineated, as required by the MCP (310 CMR 40.0904(2))?

[This review did not note any references to vertical delineation in any areas of the site. In paricular, it was noted in the Appendix A, Nov/Dec 1997 report summary that "the depth of the fill material in Area #10 was not fully known [...]." Since metals and PAH compounds are documented to have been present in the fill material sampled by the shallow test pits in Area #10, it is possible that additional

contaminants are present in the fill material at depth. Similarly, the presence and/or depth of contamination in soil immediately adjacent to or beneath the lagoons and the earthen bank has not been documented].

Why was no further sampling of PCBs conducted at the site?

[The report indicates that PCBs at levels exceeding benchmark values were detected in samples from the carbonizer lagoon and trench in May 1992. However, no further analytical data for PCBs was included in the RAO report or summary tables].

Why was no sampling conducted following individual phases of excavation to confirm that all material with concentrations exceeding standards had been removed?

[For example, why was no sampling conducted around and beneath test pit 10 to confirm that all the material with high Cr and Pb concentrations had been removed off site? Similarly, why were no samples collected from the base of the landfill subgrade, prior to consolidation, to evaluate potential concentrations at depth?]

What is the average depth to groundwater in the area of former landfill #10? What, if any, evaluation was conducted to determine the potential for groundwater infiltration into the consolidated materials, and the consequent leaching of contaminants to groundwater?

Why was no barrier material placed beneath the consolidated materials to prevent potential downward migration of contaminants over time?

Why was only one round of groundwater sampling conducted at the site?

[QA/QC note: According to page 18 of the laboratory report in Appendix E, the sample preparation for analysis by EPA Method 8270 was conducted past the 7-day holding period.]

Given the location of the Tail Race and Mill River near areas of known contamination and within 200 feet of wells with OHM, why were no surface water and sediment samples collected from either the Tail Race or the river to evaluate potential impact, as required by 310 CMR 40.0904(2)(c)?

How does the RAM Plan, as implemented, vary from on-site storage of Remediation Waste?

[The material consolidated and left in place in the landfill area meets the definition of Contaminated Media, which includes Contaminated Soil, defined as "soil containing OHM at concentrations equal to or greater than a release notification threshold established by 310 CMR 40.0300 and 40.1600" (definition in 310 CMR 40.0006). And Contaminated Media is included in the definition of Remediation Waste, so it would seem that the on-site consolidation falls under MCP regulations governing the management of remediation waste. The MCP states that:

310 CMR 40.0036(2): "where practicable, stockpiling or consolidating of Remediation Waste near sensitive human health receptors such as public and private water supply wells or sensitive environmental receptors such as wetlands, surface water bodies, or marine environments shall be avoided; and

310 CMR 40.0036(3): all remediation waste stored at the site of generation [..] shall be placed entirely on a base composed of an impermeable material [..].

3.0 RESPONSE ACTION OUTCOME AND ACTIVITY AND USE LIMITATION

The Response Action Outcome (RAO) at this site is based primarily on the use of an Activity and Use Limitation (AUL) to restrict future uses of the site. In brief, the AUL seeks to maintain future uses and activities in the consolidated Area #10 such that they are consistent with the S-2 designation said to have been created by the clean cover material. However, in Section 10.2, the RAO refers to the soil currently under cover in the Area #10 Consolidation Area as follows: "The averages for several PAH compounds and lead exceed MCP S-1 and S-2 standards. The Total Petroleum Hydrocarbon (TPH) concentrations exceeded the current (2001) MCP S-1 standards, although the TPH test has since been replaced by the Extractable Petroleum Hydrocarbon (EPH) procedure [...] Because these average concentrations exceed the Method 1 S-1 and S-2 standards, B&M has imposed an Activity and Use Limitation on the covered consolidation area in Area #10."

3.1 Reviewer Questions and Comments re: RAO and AUL at the site

Since the contaminated soil in Area #10 has not been placed on any kind of impermeable layer, the vertical extent of contamination in the landfill area has not been defined, and concentrations exceeding applicable standards have been left in place, how have the minimum requirements for an RAO been met?

[310 CMR 40.1003(5)(a) states that: A Class A or Class B RAO shall not be achieved unless and until each source of OHM which is resulting or likely to result in an increase in concentrations of OHM in an environmental medium, either as a consequence of a direct discharge or through intermedia transfer of OHM, is eliminated or controlled. Such sources may include, without limitation: [..] contaminated fill, soil, sediment, and waste deposits.]

How could an AUL be implemented at the site when soil concentrations exceed applicable Method 1 standards?

As described in DEP's May 1999 Guidance on Implementing Activity and Use Limitations, Interim Final Policy #WSC 99-300:

Section 2.5.3 Prohibited Uses of AULs

310 CMR 40.1012(4) states explicitly that an AUL cannot be used in lieu of an applicable Method standard. For example, when using Method 1, if the soil is categorized as S-2 and the calculated exposure point concentrations exceed an S-2 standard, cleanup to meet the S-2 level is needed to achieve a permanent solution. The implementation of an AUL does not negate the requirement to meet the applicable standards. Specifically, 310 CMR 40.1012(4) states that an AUL cannot be used to:

- change the category of groundwater categorized as GW-1 or GW-2 (except as provided in 310 CMR 40.0932(5)(d) with respect to existing private wells); or
- justify a conclusion of No Significant Risk when using Method 1 or 2 if an applicable standard is exceeded.

Further information provided by DEP in their February 1995 Q&A indicates that it is not possible to leave contaminated soil which exceeds Method 1 or Method 2 standards without using a Method 3 approach, which evaluates site-specific risk exposures.

RTN 3-0173
Norfolk
17 Lawrence St

MEMORANDUM

SCANNED

To: Mr. Robert A. Dangel, LSP, Camp Dresser & McKee
Cc: Ms. Karen Stromberg/DEP-NERO, Mr. William R. Swanson, VP, Camp Dresser & McKee
Cc: Buckley and Mann, Inc.
Cc: Norfolk Board of Selectmen, Norfolk Board of Health
From: Public Involvement Plan (PIP) petitioners - Buckley and Mann property, Norfolk
Date: November 7, 2001
Re: Follow-up to October 3, 2001 Memo and October 23, 2001 Public Hearing

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- The Public Involvement Plan (PIP) petitioners would like to request a date by which we will receive a written response to the questions submitted in writing on October 3, 2001.

In addition, we would like to request clarification on the following issues:

- At the Public Hearing, CDM stated that the surface water sampling requirements applicable due to 310 CMR 40.0904(2)(c) had been met by surface water sampling. Our review shows that in 1986, one surface water sample was collected from the Tail Race, upstream of the lagoons, and one surface water sample was collected from the Mill River, downstream of the lagoons. Since neither sample was collected in the vicinity of the lagoons with contaminants, they do not represent site conditions, although they may be considered representative of local conditions/background. Further, no sediment samples were collected from either the Tail Race nor the Mill River for analysis of Oil and/or Hazardous Materials (OHM) known to be present at the site. What additional sediment or surface water sampling has been conducted to meet the MCP requirement for assessment and risk characterization of the Tail Race and Mill River?

- At the Public Hearing, CDM indicated that no Method 3 was conducted because of the visible presence of unstressed vegetation. However, the Public Hearing did not explain why no Method 3 was conducted despite the documented presence of a sheen in the Tail Race, the known presence of OHM related to the site in sediments in the lagoons, and the known presence of environmental receptors at the site. Please clarify the MCP exemption used to avoid a Method 3 despite these mandatory triggers.

- At the Public Hearing, CDM suggested that the PCB levels found in sediments were not of concern despite exceeding DEP-recommended benchmark levels, because they were below PCB cleanup standards established for other sites.
  - How can the use of PCB cleanup standards that were developed to address specific conditions at other sites be justified without performing a site-specific evaluation of the receptors, concentrations, and potential risk (i.e a Method 3) at Buckley and Mann?
  - What about the metals and PAH concentrations in the lagoons that also exceed sediment benchmarks?

- At the Public Hearing, CDM suggested that PIP concerns about the lack of delineation of vertical extent of contamination had been taken out of context. Please describe the vertical extent of contamination in (a) the landfill area and (b) the lagoons, with specific references to the analytical data used to determine this extent.

- At the Public Hearing, CDM reiterated on more than one occasion that a Method 2 Risk Characterization had been completed for methylnaphthalene and naphthalene compounds that exceeded applicable standards in the lagoon(s). Please provide the original dated text for this Method 2 Risk Characterization.

- At the Public Hearing, CDM suggested that exceeding MCP S-1 and S-2 standards for PAHs was not a concern because the standards were due to be revised. Is it not true that:
  - Proposed standards cannot be used in a Method 1 risk characterization until they have been ratified by the legislature and thus implemented in the MCP? and
  - In order to use standards other than the existing Method 1 S-1 and S-2 standards, a site-specific risk characterization is required?
  - If both the above are true, does the RAO, as presented, meet the MCP requirements for achieving a condition of No Significant Risk? Where can the documentation supporting this be found?

- Please explain how the use of an AUL despite exceeding applicable standards is legally valid.

- At the Public Hearing, CDM declined to address the legal requirements established by the MCP that must be met by a PRP. These were of specific interest to the audience because of concerns that the town could undertake the legal obligations by acquiring an interest in the property. The requirements were listed on a slide and a handout at the hearing, and are provided below. Please explain, with reference to the appropriate sections of CDM's original documents, how the Response Action Outcome meets each of these legal requirements:

  - ☐ The law requires that the full extent of contamination, both vertical and horizontal, be delineated in all media 310 CMR 40.0835 and 40.0904
  - ☐ The law requires that the Tail Race and Mill River be sampled and characterized because of their proximity to areas of contamination. 310 CMR 40.0904
  - ☐ The law requires that the potential impact to wetlands be fully characterized via a process called a Method 3 risk characterization. 310 CMR 40.0942 and 40.0990
  - ☐ The law requires that contaminated soil be placed entirely on a base of impermeable material, and that it not be stockpiled in an environmentally sensitive area 310 CMR 40.0036
  - ☐ The law requires that cleanup efforts continue until the applicable standards have been met 310 CMR 40.1003
  - ☐ The law forbids the implementation of an AUL (aka deed restriction) in lieu of meeting applicable standards. 310 CMR 40.1012(4)

Norfolk
17 Lawrence ST

CDM
One Cambridge Place, 50 Hampshire Street
Cambridge, Massachusetts 02139
tel: 617 452-6000
fax: 617 452-8000

SCANNED

January 14, 2002

VIA

Public Involvement Plan Group
C/o Catherine Elder
117 Seekonk Street
Norfolk, MA 02056

Subject: Buckley & Mann Inc., Bureau of Waste Site Cleanup #3-0173

Dear Public Involvement Plan Group:

Camp Dresser & McKee Inc. (CDM) is pleased to submit the attached responses to the is Public Involvement Plan Group's written questions submitted prior to and after the October 23, 2001 public meeting.

If you have any questions, please contact me at (617) 452-6267.

Very truly yours,

Robert A. Dangel, L.S.P.
Principal Scientist
Camp Dresser & McKee Inc.

cc: Richard and Stephen Mann

Town of Norfolk
Conservation Commission
Town Hall
P.O. Box 316
Norfolk, MA 02056

Karen Stromberg, also DEP files
Department of Environmental Protection
Bureau of Waste Site Cleanup
Northeast Regional Office
205A Lowell Street
Wilmington, MA 01887

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RESPONSE TO PUBLIC INVOLVEMENT PLAN GROUP COMMENTS AND QUESTIONS DATED OCTOBER 3, 2001

SECTION 1.4 SITE ASSESSMENT AND REMEDIATION

1. Has the vertical extent of the soil contamination been delineated?

The question refers to Appendix A of the RAO report, where the November/December 1997 Revised Release Abatement Measure Plan is briefly summarized. The PIP Group refers to the statement "the depth of the fill material in Area #10 was not fully known...". This statement was written in 1997, prior to remediation in Area #10, and reflects the knowledge at that time, when only test pits had been dug. In 1998, when Area #10 was excavated under the Revised Release Abatement Measure Plan, all of Area #10 was excavated and inspected. Excavation proceeded down to native soils and hence, the depth and extent of the fill material in Area #10 was delineated. The original test pits, excavated in 1995 were representative of the Area #10. Section 6 of the RAO report includes a brief summary of the test pit observations.

The question also refers to the extent of contamination adjacent to or beneath the earthen bank of the Dye House Lagoons #1 and #2. The Lagoons are located in a area where groundwater in the unconsolidated overburden soils discharges to the Tail Race, which is adjacent to the Lagoons. The water surface in the Tail Race is 4 to 5 feet lower than the bottom in the Lagoons. Bedrock groundwater has been shown to have a higher potentiometric surface, and is rising into the unconsolidated overburden. Hence, the groundwater infiltration from the Lagoons is confined to a shallow, narrow zone less than five feet deep, extending easterly approximately 30 feet to the Tail Race.

Analytical data for chromium and TPH in Appendix D of the RAO report show that the soil contamination in the bottom of Lagoons #1 and #2 decreases with depth (the relatively high concentration material in the top 1.5 inches of Lagoon #1 has been removed).

1. Soil from the top 0.5 inches of Lagoon #1, manually scraped and drummed, designated Area #4
   Chromium: 1300 and 920 mg/kg TPH: 5100 and 6000 mg/kg

2. Soil from the next 1 inch of Lagoon #1, manually removed from the surface of the Lagoon, designated Area #5
   Chromium: 1100 mg/kg TPH: <25 mg/kg

3. Soil from Lagoon #1, mixed from surface to 3 foot depth (after the top 1.5 inches was removed)
   Chromium: 160, 64, 49 mg/kg TPH: 350, 940, 300 mg/kg

4. Soil from Lagoon #2, surficial
   Chromium: 37, 540, 58 mg/kg TPH: 92, 1400, 190 mg/kg

5. Soil from Lagoon #2, 3 foot depth
   Chromium: 15, 11, 43 mg/kg TPH: 60, 27, 540 mg/kg

Note: Two site specific background samples were analyzed for TPH in 1995, and reported in the 1996 Release Abatement Measure Plan. A sample of top soil uphill and west of the Lagoons contained 250 mg/kg TPH and a sample from the edge of Bush Pond, upstream of the plant contained 440 mg/kg. This indicates that leaf litter and organic soils can contribute to TPH. Lagoons #1 and #2 subsoils include some organic-peaty soils, and hence, the TPH in these Lagoons may be biased high by naturally occurring plant waxes. By example, Appendix G to the RAO report shows the Aliphatic C19-C-36 EPH fraction, which includes the plant wax group, was the dominant EPH fraction.

2. Why was no further sampling of PCB conducted at the site?

There was no reason to believe that PCB contamination would be present at the site, based on the type of manufacturing operations and support systems. Nevertheless, CDM collected and analyzed a few samples for PCB, as a normal procedure in evaluating old industrial sites. These samples were collected in areas most likely to indicated whether PCB contamination might exist on the site.

The PIP Group refers to samples collected in 1992 from the Carbonizer Lagoon and Carbonizer Trench, as reported in Appendix C of the RAO report:

1. Sample 2 (Lab # 92-01609) from the Carbonizer Lagoon was reported to contain 0.29 mg/kg and 0.39 mg/kg Aroclors 1254 and 1260, respectively, and less than the reporting limit of 0.048 mg/kg for other Aroclors.
2. Sample 3 (Lab # 92-01610) from the Carbonizer Lagoon Trench contained less than the 0.24 mg/kg reporting limit of all Aroclors.

Quality control spikes for the surrogate decachlorobiphenyl, to test for matrix interference in these samples, produced recoveries of 6,400 and 3,100 percent for Samples 2 and 3, respectively. Hence, the concentrations of the reported Aroclors are likely overstated. Even if these concentrations were real, the PCB concentrations would be less than 1 mg/kg clean up goal set for other sites in Massachusetts, such as the Housatonic River in Pittsfield.

Additional samples for PCB analyses were collected from other locations on the site in October 1995. The analytical results were presented in the 1996 Release Abatement Measure Plan:

1. The drums containing soil from Areas 4 and 7 contained less than the detection limit of 1.8 mg/kg.
2. Soil from Test Pit TP-6 in the "Fire Pit" Area #12, which is within the larger Area #10, contained less than the detection limit of 0.081 mg/kg.
3. Soil from Test Pit TP-21 in Lagoon #1 contained less than the detection limit of 0.075 mg/kg.

Based on the above results, CDM cannot recommend further PCB sampling and analysis in the area of the Buckley & Mann Inc. site subject to the RAO.

3. Why was no sampling conducted following individual phases of excavation to confirm that all material with concentrations exceeding standards had been removed?

Soil samples were analyzed for Areas 3, 5, 6 after contaminated soils were removed. Soil samples were also analyzed for the south end of Area #10, outside the cap. The remaining soils met MCP S-1 Method 1 Standards, as shown in Appendix F of the RAO report.

The soil from Test Pit 10 had a distinct, orange-brown rust color, and the extent of this contaminated soil was easily determined by visual examination. Hence, no analytical confirmation was necessary. Photographs presented at the October 23, 2001 public meeting showed this material when it was stockpiled on-and-under plastic, pending off site disposal.

The slightly contaminated soil in the landfill was adequately characterized in the site investigation phase of the work. Native soil was encountered under the landfill area during the 1998 remediation work. Consequently, there was no need for further characterization data.

4. What is the average depth to groundwater in the area of former landfill Area #10? What if any evaluation was conducted to determine the potential for groundwater infiltration into the consolidated materials, and the consequent leaching to groundwater?

Prior to the 1998 remediation, the depth to groundwater ranged from 2 feet below ground surface in the south end of Area #10, to 8 feet below ground surface in the areas with the highest piles. Under high groundwater conditions, the depth to groundwater in the south end of Area #10 could be less than one foot. Some of the landfill was below the groundwater table, and the rest was just above the groundwater table. The landfill had been available to leach to groundwater for more than 35 years. Monitoring well sampling and analyses in 1986 and 1998 found no groundwater contamination in the area.

5. Why was no barrier material placed beneath the consolidated material to prevent potential downward migration of contaminants over time?

The excavation and inspection of Area #10 confirmed that there were no drums, containers or other potential sources of time-release contaminants present. Consequently, future conditions will be the same as past conditions. The landfill material had been available to leach to groundwater for more than 35 years. Monitoring well sampling and analyses in 1986 and 1998 found no groundwater contamination in the area. Consequently, there is no need for a barrier under the material in the landfill.

6. Why was only one round of groundwater sampling conducted at the site?

Two rounds of sampling were conducted in and/or near the Area #10 landfill, the Carbonizer Lagoon and Lagoons #1 and #2, in 1986 and 1998. Two additional rounds of groundwater sampling were completed for groundwater in Lagoons #1 and #2 in 2000.

The PIP Group also notes that some samples reported in Appendix E to the RAO report were extracted for analysis past the 7-day holding period. These samples were refrigerated at the laboratory, and were extracted on day 8. One extra day holding time under these conditions would not result in significant under-reporting of the slowly degradable PAH compounds analyzed in these samples. PAH concentrations in these samples were all less than the reporting limits of 0.3 to 0.69 ug/L, depending on the specific compound.

7. Given the location of the Tail Race and the Mill River near areas of known contamination and within 200 feet of wells with OHM, why were no surface water and sediment samples collected from either the Tail Race or the River to evaluate potential impacts?

Lagoons #1 and #2 and the Carbonizer Lagoon have no surface water connection to the Tail Race or the Mill River. Area #10 was stabilized by vegetation prior to the 1998 remediation, and since

remediation, has been protected by three feet of clean soil and replanted. Consequently, there was no potential for erosion from these areas to reach the Tail Race or the Mill River.

There was no visual evidence, such as color from residual dye, that Lagoons #1 and #2 had any impact on the Tail Race, even when the Lagoons were still receiving wastewater prior to 1986. The analyses in Table 1 with this response to comments, collected as part of Buckley & Mann Inc.'s voluntary self-monitoring program, were reported to the Division of Water Pollution control in May 1985. Table 1 also includes analytical results for samples collected by the Division of Water Pollution Control in 1985. These data, which were not included in the 2001 RAO report, show that Lagoons #1 and #2 (active at that time) had no significant impact on the Tail Race.

A surface water sample was analyzed in 1986 from the Tail Race just down stream of the factory area. This sample location was selected to determine whether there might be an undocumented release from the factory area infiltrating the penstock discharging to the Tail Race, which is the lowest conduit down gradient of the factory area. This surface water sample was not contaminated.

A surface water sample was also collected in 1986 downstream of the manufacturing area, at the confluence of the Tail Race and the Mill River. This location was included at the request of the Massachusetts Division of Water Pollution Control, to evaluate the overall impact of the site on the River. This surface water sample was not contaminated.

The absence of groundwater contamination in monitoring wells in the Area #10 landfill and near the Carbonizer Lagoon indicate that there was no potential for pollutant migration from these areas to the Mill River or the Tail Race.

Considering the above, there was no evidence to suspect that contamination would be found in the Tail Race or Mill River surface water or sediments related to activities at Buckley & Mann Inc.

8. How does the RAM Plan, as implemented, vary from on-site storage of Remediation Waste, with reference to 310 CMR 40.0032?

The cited regulation applies to contaminated media stockpiled for off site disposal or further remedial actions. The procedure was followed for the Test Pit 10 material from Area #10, as shown in the photographs presented at the October 23, 2001 public meeting.

The cited regulation does not apply to the soil retained on site in Area #10, which had resided in that location for over 35 years, and the relatively small volume of soil consolidated from Areas #3 through 7 to Area #10. These soils are subject to the AUL.

2.0 RISK CHARACTERIZATION

9. It is further assumed, based on a statement in Appendix B, that S-2 Standards are being applied to Area #10 following the installation of clean cover material, and that S-1 Standards apply to the rest of the site.

The three feet of clean cover soil placed over the consolidation area in Area #10 meets S-1 Standards. Soil at a depth below 3 feet is classified S-2, but access is restricted under the Activity and Use Limitation.

2.2 REVIEWER QUESTIONS AND COMMENTS RE: THE RISK ASSESSMENT

10. Why would the S-2 Standards apply in the consolidated landfill area following the implementation of the AUL?

The top three feet of soil in the consolidation area in Area #10 is S-1, and the soils meets the S-1 Standards. The S-2 Standards would apply to the soil below 3 feet, and as such, access to this soil is physically restricted by the geotextile and also restricted under the Activity and Use Limitation. Refer to Response 15 below for further discussion on this subject.

11. Given the wetlands nature the site, and the known presence of aquatic life such as frogs in Lagoon #2 (Appendix B), why were no environmental receptors identified…?

Refer to Response 13.

12. Why was none of the data from any of the lagoons, including the Carbonizer Lagoon, compared to sediment benchmarks?

Refer to Response 13.

13. Why was a Method 3 risk characterization not performed for the site?

The comment continues, "There are several situations in which a Method 1 may not be used, and a Method 3 risk characterization is required by the MCP. Section 310 CMR 40.0971 of the MCP states that if contamination is present in one or more environmental media other than soil or groundwater, Method 1 alone shall not be used. Sediments and surface water both meet the definition of other media, so at this site, the presence of sediments as described above, as well as the presence of contaminants in surface water as stated in Section 6 of the report, would require the use of a Method 3. Also, Section 310 CMR 40.0942 of the MCP requires that a Method 3 be conducted if environmental receptors have been identified for a site, and if OHM known to bioaccumulate are present within 2 feet of the ground surface, as is the case with the lagoons."

A Method 1 human health risk characterization combined with a Method 3, Stage I environmental screening ecological Risk Characterization is appropriate for this site. According to DEP's Guidance for Disposal Site Risk Characterization, "the combination Method 1/Method 3 Risk Characterization is an option at sites where the contamination is not limited to soil or groundwater, but the exposure to humans comes predominately from those media". This combination approach was written into the regulations so that sites with minor sediment or surface water contamination could benefit from using the Method 1 standards to evaluate soil and groundwater while still adequately evaluating the potential environmental risks by Method 3.

Groundwater and soil, including the Carbonizer Lagoon and Lagoons #1 and #2, meet MCP Method 1 Standards, as described in the RAO and in this compilation of responses.

The RAO report does not document a comprehensive Method 3 Environmental Risk Characterization for the site. CDM considered the following evidence prior to preparing the RAO report:

- The absence of any overt evidence of contamination or potential for future release from past operations on the site. There are no current operations.

- The healthy vegetation in the Carbonizer Lagoon, developed over the last 35 years.
- The healthy vegetation in Lagoons #1 and #2, which developed after the Lagoons were removed from wastewater treatment service in 1986.
- The concentrations of the contaminants. Few contaminants exceed the sediment "Screening Levels", and the concentrations of these contaminants are only marginally above the "Screening Levels".
- The potential for significant damage to the Carbonizer Lagoon wetlands from a remediation effort, for minimal environmental improvement.

CDM concluded, in Sections 10 of the RAO report, that there would be no significant environmental benefit from further remediation in the wetlands.

In preparation for the public meeting, CDM revisited the site to further assess the condition of the vegetation in the wetland areas. The memorandum attached with this comment letter describes the condition of these areas, and concludes that there is no indication of adverse impact on the plant ecology from any residual contamination, essentially completing the Method 3, Stage 1 environmental screening.

The "contamination in surface water" comment in the PIP Group question is not applicable any recent condition at the Buckley & Mann Inc. Section 6 of the RAO report refers to contaminated "surface water" in former wastewater treatment Lagoons #1 and #2 when the Lagoons were in active service during and prior to 1986. Wastewater treatment lagoons in active service are not "surface waters" under the MCP. Residual contaminants biodegraded shortly after wastewater discharges ceased in 1986.

3.1 REVIEWER QUESTIONS AND COMMENTS RE: RAO AND AUL AT THE SITE

14. Since the contaminated soil in Area #10 has not been placed on any kind of impermeable layer, the vertical extent of the contamination in the landfill area has not been defined and the concentrations exceeding applicable standards have been left in place, how have the minimum requirements of the RAO been met?

The Area #10 material has been in place for over 35 years. The residual PAH and metal contaminants are at low concentrations and unlikely to migrate. Indeed, no groundwater contamination has been found in monitoring wells installed through and adjacent to Area #10. There is no requirement in the MCP for such material as that found in Area #10 to be placed on an impermeable layer.

The 310 CMR 40.0036 to a "base of impermeable material" refers to temporary stockpiling of remediation waste pending off site disposal, and this procedure was followed for the Test Pit 10 material. The intent of the regulation is to prevent migration or leaching of contaminated soil pending off site disposal. The regulation is not applicable to the material retained in the Area #10 *consolidation area.*

The assertion that the vertical extent of the contamination in the landfill has not been defined in incorrect. This claim was taken out of context, from a description of the 1995 test pit program. During remediation in 1998, the Area #10 was excavated and inspected to native soils, between approximately 2 and 8 feet below grade. Photographs presented at the October 23, 2001 public meeting showed the excavations.

15. How could an AUL be implemented at the site when soil concentrations exceed applicable Method 1 standards?

A risk characterization can be conducted at any stage of the MCP process- either as a baseline assessment before remediation or following remediation. At this site, a Method 1 risk characterization was conducted following remediation, after the contaminated soils were covered with a cap.

The approach used in this project for Area #10 provides four levels of protection:

1. As described in Section 6 of the RAO report, samples analyzed in the 1995 characterization study for Area #10 were selected to be *biased high*. Samples were taken only from test pits with visible debris and from within these pits, only from elevations which visually contained debris. No samples were taken from test pits free of visible debris or contamination.
2. Area #10 was thoroughly excavated and inspected during the 1998 remediation, to determine whether drums or other undocumented materials might be present. The work showed that the fill material was well characterized by the test pits. (Only two drums were found- one with sodium bicarbonate and one with a water-insoluble glassy flake plasticizer. Both were removed for off site disposal.)
3. A geotextile was placed over the consolidated material as a warning/identification layer, and three feet of clean soil were installed on top of the material.
4. An AUL was recorded, to restrict future excavation in Area #10.

Although the soils under the cap exceed applicable Method 1 Standards, the presence of the cap and the AUL preclude any further exposure to contaminated soil. This approach to site closure under the MCP has been used at landfills and sites with contaminated urban fill (with PAH and metals concentrations higher than at Buckley & Mann Inc.) converted to playing fields elsewhere in Massachusetts with similar cover and AUL restrictions. Contaminant concentrations in the soils outside of the cap are well below Method 1 soil standards. Therefore, a condition of No Significant Risk exists for Area #10. The purpose of the AUL is to maintain a condition of No Significant Risk by identifying and prohibiting any activities (such as excavation) that could potentially damage the cap.

The question also refers to whether the imposition of an AUL requires a Method 3 risk assessment, rather than a Method 1 risk assessment. This question is addressed in the next response.

Further information provided by DEP in their February 1995 Q&A indicates that it is not possible to leave contaminated soil which exceeds Method 1 or Method 2 standards without using a Method 3 approach, which evaluates site-specific risk exposures.

This question asks whether the conclusion of No Significant Risk for Area #10 requires a Method 3 site specific Risk Assessment, rather than a Method 1 Risk Assessment, because soil below the three foot clean cover for the Area #10 consolidation area exceeds S-1 and S-2 Method 1 Standards for four PAH compounds and the S-1 (but not the S-2) Standard for lead. The four PAH compounds, in the high-biased samples (see above) averaged 1.79 to 3.99 mg/kg, relative to Method 1 Standards of 0.7 mg/kg for S-1 soil and 0.7 to 1.0 mg/kg for S-2 soil. Lead averaged 501 mg/kg in these same samples.

A Method 3 Risk Assessment for Area #10 would certainly be a more robust approach than Method 1. But, such an assessment would reach the same conclusion, that there is No Significant Risk, considering that:

1. The compounds have low water solubility, and groundwater analyses have shown no contamination.
2. The three feet of clean cover, geotextile warning layer and AUL eliminate the exposure pathway for direct contact or dust inhalation of the contaminated soil, except for future utility work, which would require a soil management plan under the terms of the AUL for any soil excavations below the cap.

As described by CDM in the October 23, 2001 public meeting, Paul Locke (DEP Office of Research and Standards) published draft revisions to the Method 1 Standards in September 2001. While the draft changes are not yet in effect, and may change, the methodology used to generate the revisions could be applied to the four PAH compounds in question at Buckley & Mann Inc. Locke's draft would raise the S-1 Standards above the concentration found at Buckley & Mann Inc. Hence, a Method 3 Risk Assessment for these compounds, using the same methodology, would show that these compounds posed No Significant Risk (even without an AUL).

PUBLIC INVOLVEMENT PLAN GROUP COMMENTS AND QUESTIONS DATED NOVEMBER 7, 2001

16. At the public hearing, CDM stated that surface water sampling requirements applicable ....had been met... What additional sediment or surface water sampling has been conducted to meet MCP requirements for assessment and risk characterization of the Tail Race and Mill River?

Water quality in the Tail Race was monitored from 1979 to 1985, when Lagoons #1 and #2 were still in service, as described in Response 7 and Table 1. There was no significant adverse impact on Tail Race water quality, based on indicator pollutants.

The groundwater samples collected from the Lagoons in 2000 showed that the residual PAH contaminants in the Lagoon bottom soils are adsorbed on the soil and that the groundwater in the Lagoons meets MCP GW-1 (and GW-3) Standards. Neither the Tail Race nor the Mill River received direct discharge of wastewater from manufacturing operations at Buckley & Mann Inc. The wastewater was subject to treatment in the Carbonizer Lagoon (until operations ceased in 1965) and Lagoons #1 and #2 (until operations ceased in 1986) prior to filtration through the berms surrounding these manmade impoundments.

Consequently, there was no technical justification for additional surface water sampling or sediment sampling in the Tail Race or Mill River.

17. At the Public Hearing, CDM indicated that no Method 3 was conducted because of the visible presence of unstressed vegetation. However, the Public Hearing did not explain why no Method 3 was conducted despite the documented presence of a sheen in the Tail Race, the known presence of OHM related to the site in the lagoons, and the known presence of environmental receptors at the site. Please clarify the MCP exemption used to avoid a Method 3 despite these mandatory triggers.

CDM personnel have no recollection of an oil sheen in Lagoons #1 or #2 during their operation as wastewater treatment Lagoons prior to 1986, in the Tail Race during that period, or subsequently.

Refer to Response 13 for additional comments on subject of a Method 3 Risk Characterization.

18. At the Public Hearing, CDM suggested that the PCB levels found in sediments were not of concern despite exceeding DEP-recommended benchmark levels, because they [PCB at Buckley & Mann Inc.] were below PCB cleanup standards established for other sites. How can use of PCB cleanup standards that were developed for other sites be justified without performing a site-specific evaluation of the receptors, concentrations and potential risk (i.e. a Method 3) at Buckley & Mann Inc.? What about the metals and PAH concentrations in the lagoons that also exceed sediment benchmarks?

The PCB concentrations reported are suspected of high bias, as described in Response 2 above; "Quality control spikes for the surrogate decachlorobiphenyl to test for matrix interference in these samples produced recoveries of 6,400 and 3,100 percent for Samples 2 and 3, respectively. Hence, the concentrations of the reported Aroclors are likely overstated. Even if these concentrations were real, the PCB concentrations would be less than clean up 1 mg/kg clean up goal set for other sites in Massachusetts, such as the Housatonic River in Pittsfield." CDM notes that the PCB (if actually present) reported for the sediment at Buckley & Mann Inc. is in an

isolated wetland not directly connected to the Mill River or Tail Race, and hence, not subject to erosion and migration. A Method 3 Risk Characterization and Risk Management plan would be unlikely to require cleanup standards more stringent than those set for the Housatonic River.

With regard to the metals and PAH compounds, please refer to Response 13.

19. At the Public Hearing, CDM suggested that PIP concerns about the lack of delineation of vertical extent of contamination had been taken out of context. Please describe the vertical extent of contamination in (a) the landfill area and (b) the lagoons, with specific references to the analytical data used to determine this extent.

For the landfill area, please refer to Response 1. There was a visible difference between the fill material and the underlying native soils. No analytical testing was required to make this distinction. Furthermore, contaminants are immobile and the concentrations in the fill are relatively low.

For Lagoons #1 and #2, please refer to Response 1. Most of the contamination in Lagoon #1 was in the top 1.5 inches. This layer was removed with hand tools in 1988, and the material was subsequently designated Area #4 and Area #5. The remaining contamination in Lagoon #2 decreases with depth, as summarized in Response 1.

For the Carbonizer Lagoon, metals concentrations decrease with depth. The two samples reported in Appendix C of the RAO report were taken at 0 to 6 inches (SS-5) and 6 to 12 inches (SS-5A) below the surface. The original laboratory report was in included with the 1986 "Report on an Environmental Site Assessment at Buckley & Mann Inc." The data show a rapid decrease in metals concentrations with depth:

	Top 6 inches	Next 6 inches
Chromium	450 mg/kg	62 mg/kg
Lead	670 mg/kg	73 mg/kg
Zinc	920 mg/kg	260 mg/kg

19. At the Public Hearing, CDM reiterated on more than one occasion that a Method 2 Risk Characterization had been completed for methylnaphthalene and naphthalene compounds that exceeded applicable standards in the Lagoon(s). Please provide the original dated text for this Method 2 Risk Characterization.

The following clarifies the use of a Method 2 Risk Characterization for the residual compounds in Lagoons #1 and #2, as explained in Section 9 of the RAO. CDM may have mis-spoke at the October 23, 2001 Public Hearing, confusing how the naphthalenes and biphenyl were handled under the Risk Characterization.

Soil concentrations of methylnaphthalene and naphthalene in Lagoons #1 and #2 did not exceed S-1/GW-1 standards, and the concentration of these compounds in clarified groundwater did not exceed GW-1 (or GW-3) Standards. Consequently, there was no need for a Method 2 Risk Characterization for these compounds.

Soil concentrations of biphenyl in Lagoons #1 and #2 slightly exceeded S-1/GW-1 standards, but the concentration of these compounds in clarified groundwater did not exceed GW-1 (or GW-3) Standards. Hence, a Method 2 approach was used to show that under site specific conditions, measured in actual groundwater samples from the source area, leaching to concentrations greater

than the Standard did not occur. Concentrations of biphenyl were well below the Method 2 limit for direct contact.

20. At the Public Hearing, CDM suggested that exceeding the MCP S-1 and S-2 standards for PAHs was not a concern because the standards were due to be revised……

CDM said at the Public Hearing that the draft revisions to the Method 1 Standards could *not* be used directly. CDM referenced comments by Paul Locke, DEP Office of Research and Standards, who said that the methodology used to develop the draft Standards could be used, and that under a Method 3 Risk Characterization, the same or similar conclusions could be reached. CDM noted that the concentrations in the Area #10 samples were less than the draft Standards, and that hence, a simple Method 3 Risk Characterization would show No Significant Risk in Area #10. Furthermore, such a Risk Characterization, might obviate the need for an Activity and Use Limitation in Area #10.

21. Please explain how the use of an AUL despite exceeding applicable standards is legally valid. At the Public Hearing, CDM declined to address the legal requirements established by the MCP that must be met by a PRP…….

These questions and assertions repeat questions listed above. Refer the to appropriate responses.

TABLE 1
SURFACE WATER QUALITY DATA
BUCKLEY & MANN INC.

Sample Date	Location	CDM Lab #	pH	Chloride mg/L	COD mg/L	BOD mg/L	Total solids mg/L	Total volatile solids mg/L
Samples analyzed by CDM for Buckley & Mann Inc.								
11-Aug-77	Bush Pond	2472	7.1	32	11			
11-Aug-77	Tail Race, downstream of Lagoon	2473	6.45	35	15			
21-Sep-77	Bush Pond	2622	6.6	30	7	<1		
21-Sep-77	Tail Race, downstream of Lagoon	2624	6.35	39	7	2		
11-Sep-79	Bush Pond	5273	7.14	26	25	<10		
11-Sep-79	Tail Race, downstream of Lagoons	5274	6.54	22	<10	10		
Samples analyzed by the MA Division of Water Pollution Control								
28-May-85	Bush Pond		6.0		36		124	32
28-May-85	Tail Race, downstream of Lagoon		6.4		36		132	14

Note: Lagoon #2 was constructed in 1978 to supplement Lagoon #1.

CDM

Memorandum

To: *Robert Dangel, LSP*

From: *Dwight Dunk, Professional Wetland Scientist*

Date: *October 22, 2001*

Subject: *Buckley and Mann Property, Norfolk, MA*

This field completion memorandum summarizes today's qualitative plant community assessment completed at the Buckley and Mann property in Norfolk, Massachusetts. The attached Figure 4 from the RAO presents the areas evaluated during the site visit. The purpose of the site visit was to assess the plant communities in the following locations identified on the attached figure; Lagoon #1, Lagoon #2, Wetland (north of Lagoon #2), Lagoon #3 and the Carbonizer Lagoon. These locations support various types of wetland plant communities.

First, a brief discussion of wetland plant ecology. All plants would "prefer" to live in ideal conditions; defined as areas with well drain soils, soils with neutral pH, loamy soils (soils with equal percentages of silt, clay and sand particles) and sufficient irrigation. Not all environments present preferred conditions and therefore plants compete with each other for these preferred conditions. A wetland area is a very harsh or stressed environment; poorly drain soils, acidic soil conditions, tight soils (high fractions of silt and clay particles) and excess water. The plants found in wetlands have adapted to these harsh conditions, but would "prefer" to live in upland conditions. Wetland plants are usually out-competed from upland areas and upland plants have not adapted to the harsh wetland conditions. Hydrology is the primary factor controlling the plant community type in a wetland. Extremely wet conditions typically defined the plant community. In the northeastern United States, wetter areas usually support marshes, drier wetland communities can support a forested wetland, and a variety of community types may exist between these two extremes.

The wetland areas observed today are described below.

Lagoon #1

This wastewater lagoon was used to treat industrial wastewater while the Buckley and Mann company was in operation. This lagoon was in service until 1986 and contained permanent standing water when it was in use.

During the site assessment, soils in this lagoon were saturated to the surface. Test pits within the lagoon indicate that the groundwater was about one foot below the soil surface on October 22, 2001, after a period with below normal rainfall. The soils in the floor of this man-made lagoon are sandy. Clean sand is present in the top six to eight inches and black sand with a faint oil odor is present below the clean sand.

The plant community present in the lagoon is young, developing after the cessation of use as a treatment lagoon. The community is emergent and includes sedges (*Scirpus cyperinus, Carex* sp.), soft rush (*Juncus effuses*), grasses and moss. This plant community suggests that the lagoon contains standing for the majority of the growing season. Small areas of exposed soil were observed in the lowest elevation of the lagoon, where standing water remains except during prolonged dry periods. Observations by other CDM employees report standing water well into the summer months with standing water observed year round in some years. The stress of the extremely wet conditions and variable wet conditions limit the structural and species diversity present in this lagoon.

Wildlife signs observed in this lagoon include numerous mammal tracks, deer, raccoon and canine tracks (dog or coyote) and water insects within the pool present in the lagoon.

Lagoon #2
This lagoon was also used to treat industrial wastewater from 1978 to 1986. The plant community is also emergent, and includes sedges, rushes, grasses, a small patch of cat-tails and mosses. The lowest portion of the lagoon contains exposed soils, too. The soils within this lagoon are sandy soils and groundwater was about one foot below the surface at the lower, north end of the Lagoon on October 22, 2001. Aquatic insects and bullfrog tadpoles were observed in the north test pit pool in this Lagoon. Again the hydrology determines the plant community and limits the community to emergent species.

Wetland 1 (North of Lagoon 2, on the west side of the Tail Race)
This appears to be a natural wetland and contains deep organic soils (about eight inches of black organic soils above sand). This wetland is also an emergent community with cat-tails, sedges, grasses, rushes, goldenrod and a few shrubs. This wetland expresses greater species and structural diversity than the former wastewater treatment Lagoons #1 and #2. However, the hydrology is the controlling factor and maintains a community dominated by emergent plants.

Lagoon #3
Lagoon #3, constructed in 1978, was not used as a treatment lagoon. Lagoon #3 drains through a shallow ditch to Wetland 1, and hence Lagoon #3 is never flooded. The Lagoon #3 plant community exhibits the greatest species and structural diversity of the four wetlands on the westerly side of the site.

Carbonizer Lagoon

The Carbonizer Lagoon is located on the easterly side of the site. It contains a narrow channel and flow within the channel was observed during the site visit. Pockets of standing water were also observed. Depending on the controlling hydrology, the lagoon contains standing water, emergent vegetation, emergent vegetation with shrubs, and a small island a bog community on the east. A portion of the bog is floating (or quaking) bog. This lagoon contains a well developed wetland community.

Conclusion

The wetland communities within the natural wetlands and former lagoons on the Buckley and Mann site do not appear to be plant communities stressed by chemical contamination. Plants were not stunted nor did they appear to be dead or dying - typical signs for chemically stressed vegetation. The plant diversity appears to be normal for the localized environments. The few areas of exposed soils within the former lagoons are shallow ponding areas that remain wet throughout the entire, or long enough, portions of the growing season to prevent colonization by wetland plants. These pools dry out periodically and thereby prevent the growth of truly aquatic plants.

The former Lagoons #1 and #2 will continue to develop over time into communities with greater species diversity and structural diversity compared to the current conditions. These communities are developing in former lagoons that used to contain standing water at all times. The greatest stressor controlling these communities is the fluctuating hydrologic regime to which the areas are subjected.

Dwight Dunk is a wetland ecologist with over 13 years of consulting experience. He is skilled at wetland resource delineation in freshwater and coastal environments, wetland function and values evaluations, wildlife habitat assessments, wetland replication planning and design, environmental permitting, environmental impact assessment, Massachusetts (MEPA) and National Environmental Policy ACT (NEPA) documentation, development feasibility studies, and environmental planning.

NORFOLK
17 LAWRENCE ST
3-0173

Buckley & Mann, Inc.
14 Bush Pond Road
Norfolk, MA 02056

December 13, 2000

Department of Environmental Protection
Northeast Regional Office
205A Lowell Street
Wilmington, MA 01887

Enclosed please find a Tier II Extension request for the Buckley & Mann property in Norfolk, Massachusetts. The site is Bureau of Waste Cleanup #3-0173.

If you have any questions, please contact Richard Mann at (508) 528-7422 ext.121, or Stephen Mann at (508) 528-4296.

Stephen L. Mann, Treasurer

NORFOLK
17 LAWRENCE ST
3-0173

MCP TIER II EXTENSION REPORT
for
BUCKLEY & MANN, INC., NORFOLK, MASSACHUSETTS

BUREAU OF WASTE SITE CLEAN-UP SITE NUMBER 3-0173

Prepared by

CAMP DRESSER & McKEE INC.
CAMBRIDGE, MASSACHUSETTS

December 7, 2000

Robert A. Dangel
Licensed Site Professional # 7798

William R. Swanson
Licensed Site Professional # 6406

Massachusetts Department of Environmental Protection **BWSC-107A**
Bureau of Waste Site Cleanup

TIER CLASSIFICATION, TIER II EXTENSION & TIER II TRANSFER TRANSMITTAL FORM

Pursuant to 310 CMR 40.0510 and 40.0560 (Subpart E)

Release Tracking Number: 3 - 173

A. DISPOSAL SITE LOCATION:

Disposal Site Name: Buckley & Mann, Inc

Street: 17 Lawrence Street Location Aid: Bush Pond

City/Town: Norfolk, MA ZIP Code: 02056-0000

Related Release Tracking Numbers That This Submittal Will Address:

RECEIVED
DEC 13 2000
DEP/NORTHEAST REGION
WOBURN, MASS.

B. THIS FORM IS BEING USED TO: (check all that apply)

- ☐ Submit a new or revised **Tier Classification Submittal for a Tier I Site**, including a Numerical Ranking Scoresheet (complete Sections A, B, C, I, J, K and L).
- ☐ Submit a new or revised **Tier Classification Submittal for a Tier II Site**, including a Numerical Ranking Scoresheet (complete Sections A, B, C, F, G, I, J, K and L).
- ☐ Submit a **Notice that an additional Release Tracking Number(s) is (are) being linked to this Tier Classified Site** and rescoring is not required at this time (complete Sections A, B, J, K and L). If this submittal is for a Tier I Site, you must also submit a Minor Permit Modification Transmittal Form (BWSC-109).

  List Additional Release Tracking Number(s):
- ☐ Submit a **Phase I Completion Statement supporting a Tier Classification Submittal** (complete Sections A, B, I, J, K and L).
- ☑ Submit a **Tier II Extension Submittal** for Response Actions at a Tier II Site (complete Sections A, B, D, F, G, I, J, K and L).
- ☐ Submit a **Tier II Extension Submittal for Response Actions taken after expiration of a Waiver,** pursuant to 310 CMR 40.0630(4) (complete Sections A, B, D, F, J, K and L, and also complete Sections G and I *or* Section H).*
- ☐ Submit a **Tier II Transfer Submittal** for a change in person(s) undertaking Response Actions at a Tier II Site (complete Sections A, B, E, F, G, I, J, K, L, M, N and O).
- ☐ Submit a **Tier II Transfer Submittal for a change in person(s) undertaking Response Actions at a Waiver Site,** pursuant to 310 CMR 40.0630(6) (complete Sections A, B, E, F, J, K, L, M, N and O, and also complete Sections G and I *or* Section H).*

You must attach all supporting documentation required for each use of form indicated, including copies of any Legal Notices and Notices to Public Officials required by 310 CMR 40.1400.
***NOTE: The Waiver expires on the effective date of this submittal and all further Response Actions must be taken as a Tier II Site.**

C. TIER CLASSIFICATION SUBMITTAL:

Numerical Ranking Score for Disposal Site: (from Numerical Ranking Scoresheet)

Proposed Tier Classification of Disposal Site: (check one) ☐ Tier IA ☐ Tier IB ☐ Tier IC ☐ Tier II

Check which, if any, of the Tier I inclusionary criteria are met by the Disposal Site, pursuant to 310 CMR 40.0520:

- ☐ Groundwater is located within an Interim Wellhead Protection Area or a Zone II, and there is evidence of groundwater contamination by an Oil or Hazardous Material at the time of Tier Classification at concentrations equal to or exceeding the applicable RCGW-1 Reportable Concentration set forth in 310 CMR 40.0360.
- ☐ An Imminent Hazard is present at the time of Tier Classification.

☐ Check here if this Tier Classification revises a previous submittal for this Disposal Site. You must include a revised Numerical Ranking Scoresheet with this submittal. If a Tier I Permit has been issued, you may also need to submit a Major Permit Modification Application (BWSC 10).

If incorporating additional Release(s) into the Disposal Site, list Release Tracking Number(s):

D. TIER II EXTENSION SUBMITTAL REQUIREMENTS:

State the expiration date of the Tier II Classification or Waiver for the Disposal Site, whichever is applicable: 02/22/01

Attach a statement summarizing why a Permanent or Temporary Solution has not been achieved at the Disposal Site. A Tier II Extension is effective for a period of one year beyond the current expiration date of the Tier II Classification or Waiver.

E. TIER II TRANSFER SUBMITTAL REQUIREMENTS:

State the proposed effective date of the change in person(s) undertaking Response Actions at the Disposal Site:

Attach a statement summarizing the reasons for the proposed change in person(s) undertaking the Response Actions. All Response Actions must be completed by the deadline applicable to the person who first filed either a Tier Classification Submittal for the Disposal Site or received a Waiver of Approvals.

TIER CLASSIFICATION, TIER II EXTENSION & TIER II TRANSFER TRANSMITTAL FORM

Pursuant to 310 CMR 40.0510 and 40.0560 (Subpart E)

Release Tracking Number: 3 - 173

F. DISPOSAL SITE COMPLIANCE HISTORY SUMMARY:

> If providing either a **Tier Classification Submittal for a Tier II Site** or a **Tier II Extension Submittal for a Waiver Site**, the person named in **Section J** must provide a Compliance History.
> If providing a **Tier II Extension Submittal for a Tier II Site**, the person named in **Section J** must **update** their Compliance History since the effective date of the Tier II Classification.
> If providing a **Tier II Transfer Submittal for a Tier II or Waiver Site**, the person named in **Section M** must provide a Compliance History.

Compliance History for (provide only one name per History): Buckley & Mann, Inc.

☑ Check here if there has been no change to the Compliance History of the person named above (Extension Submittal for a Tier II Site ONLY).

List all permits or licenses that have been issued by the Department that are relevant to this Disposal Site:

PROGRAM:	PERMIT NUMBER:	PERMIT CATEGORY:	FACILITY ID:
Air Quality	0		
Hazardous Waste (M.G.L. c. 21C)	0		
Solid Waste	0		
Industrial Wastewater Management	0		
Water Supply	0		
Water Pollution Control/Surface Water	0		
Water Pollution Control/Groundwater	0		
Water Pollution Control/Sewer Connection	0		
Wetland & Waterways	0		

List all other Federal, state or local permits, licenses, certifications, registrations, variances, or approvals that are relevant to this Disposal Site:

ISSUING AUTHORITY OR PROGRAM, OR DOCUMENTATION TYPE:	IDENTIFICATION NUMBER:	DATE ISSUED:
Inactive site		

If needed, attach to this Transmittal Form a statement further describing the Compliance History of this Disposal Site. This statement must describe the compliance history of the person named above with the following:

(1) DEP regulations; and
(2) other laws for the protection of health, safety, public welfare and the environment administered or enforced by any other government agency.

Such a statement should identify information such as:

(1) actions relevant to the Disposal Site taken by the Department to enforce its requirements including, but not limited to, a Notice of Noncompliance (NON), Notice of Intent to Assess Civil Administrative Penalty (PAN), Notice of Intent to Take Response Action (NORA), and an administrative enforcement order;
(2) administrative consent orders;
(3) judicial consent judgements;
(4) similar administrative actions taken by other Federal, state or local agencies;
(5) civil or criminal actions relevant to the Disposal Site brought on behalf of the DEP or other Federal, state, or local agencies; and
(6) any additional relevant information.

For each action identified, provide the following information:

(1) name of the issuing authority, type of action, identification number and date issued;
(2) description of noncompliance cited;
(3) current status of the matter; and
(4) final disposition, if any.

TIER CLASSIFICATION, TIER II EXTENSION & TIER II TRANSFER TRANSMITTAL FORM

Pursuant to 310 CMR 40.0510 and 40.0560 (Subpart E)

Release Tracking Number: 3 - 173

G. CERTIFICATION OF ABILITY AND WILLINGNESS:

> If providing either a **Tier II Classification Submittal** or a **Tier II Extension Submittal**, the person who signs this certification **MUST** be the person named in **Section J**, or that person's agent.
> If providing a **Tier II Transfer Submittal**, the person who signs this certification **MUST** be the person named in **Section M**, or that person's

I attest under the pains and penalties of perjury that (i) I/the person(s) or entity(ies) on whose behalf this submittal is made has/have personally examined and am/is familiar with the requirements of M.G.L. c. 21E and 310 CMR 40.0000; (ii) based upon my inquiry of the/those Licensed Site Professional(s) employed or engaged to render Professional Services for the disposal site which is the subject of this Transmittal Form and of the person(s) or entity(ies) on whose behalf this submittal is made, and my/that person's(s') or entity's(ies') understanding as to the estimated costs of necessary response actions, that/those person(s) or entity(ies) has/have the technical, financial and legal ability to proceed with response actions for such site in accordance with M.G.L. c. 21E, 310 CMR 40.0000 and other applicable requirements; and (iii) that I am fully authorized to make this attestation on behalf of the person(s) or entity(ies) legally responsible for this submittal. I/the person(s) or entity(ies) on whose behalf this submittal is made is aware of the requirements in 310 CMR 40.0172 for notifying the Department in the event that I/the person(s) or entity(ies) on whose behalf this submittal is made learn(s) that it/they is/are unable to proceed with the necessary response actions.

By: _____ Title: TREASURER
(signature)

For: Buckley & Mann, Inc. Date: 12/13/00
(print name of person or entity recorded in Section J or M, as appropriate)

If you are submitting either a Tier II Extension Submittal for a Waiver Site or a Tier II Transfer Submittal for a Waiver Site, you may choose to sign the alternative Ability and Willingness Certification found in Section H in place of providing the certification in Section G and the LSP Opinion in Section I.

H. ALTERNATIVE CERTIFICATION OF ABILITY AND WILLINGNESS:

> If providing a **Tier II Extension Submittal for a Waiver Site**, the person who signs this certification **MUST** be the person named in **Section J**, or that person's agent
> If providing a **Tier II Transfer Submittal for a Waiver Site**, the person who signs this certification **MUST** be the person named in **Section M**, or

I attest under the pains and penalties of perjury that (i) I/the person(s) or entity(ies) on whose behalf this submittal is made has/have personally examined and am/is familiar with the requirements of M.G.L. c. 21E and 310 CMR 40.0000; (ii) based upon my inquiry of the Consultant-of-Record for the disposal site which is the subject of this Transmittal Form and of the person(s) or entity(ies) on whose behalf this submittal is made, and my/that person's(s') or entity's(ies') understanding as to the estimated costs of necessary response actions, that/those person(s) or entity(ies) has/have the technical, financial and legal ability to proceed with response actions for such site in accordance with M.G.L. c. 21E, 310 CMR 40.0000 and other applicable requirements; and (iii) that I am fully authorized to make this attestation on behalf of the person(s) or entity(ies) legally responsible for this submittal. I/the person(s) or entity(ies) on whose behalf this submittal is made is aware of the requirements in 310 CMR 40.0172 for notifying the Department in the event that I/the person(s) or entity(ies) on whose behalf this submittal is made learn(s) that it/they is/are unable to proceed with the necessary response actions.

By: _____ Title: _____
(signature)

For: _____ Date: _____
(print name of person or entity recorded in Section J or M, as appropriate)

I. LSP OPINION:

I attest under the pains and penalties of perjury that I have personally examined and am familiar with this transmittal form, including any and all documents accompanying this submittal. In my professional opinion and judgment based upon application of (i) the standard of care in 309 CMR 4.02(1), (ii) the applicable provisions of 309 CMR 4.02(2) and (3), and (iii) the provisions of 309 CMR 4.03(5), to the best of my knowledge, information and belief,

> *if Section B of this form indicates that a **Tier I or Tier II Classification Submittal** which relies upon a previously submitted Phase I Completion Statement is being submitted*, this Tier Classification Submittal has been developed in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000;

> *if Section B of this form indicates that a **Phase I Completion Statement** or a **Tier I or Tier II Classification Submittal** which does not rely upon a previously submitted Phase I Completion Statement is being submitted*, the response action(s) that is (are) the subject of this submittal (i) has (have) been developed and implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, and (iii) complies(y) with the identified provisions of all orders, permits, and approvals identified in this submittal;

SECTION I IS CONTINUED ON THE NEXT PAGE

Massachusetts Department of Environmental Protection **BWSC-107A**
Bureau of Waste Site Cleanup

TIER CLASSIFICATION, TIER II EXTENSION & TIER II TRANSFER TRANSMITTAL FORM

Pursuant to 310 CMR 40.0510 and 40.0560 (Subpart E)

Release Tracking Number: 3 - 173

I. LSP OPINION: (continued)

> *if Section B of this form indicates that a **Tier II Extension Submittal** or a **Tier II Transfer Submittal** is being submitted,* the response action(s) that is (are) the subject of this submittal (i) is (are) being implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, and (iii) complies(y) with the identified provisions of all orders, permits, and approvals identified in this submittal.

I am aware that significant penalties may result, including, but not limited to, possible fines and imprisonment, if I submit information which I know to be false, inaccurate or materially incomplete.

☐ Check here if the Response Action(s) on which this opinion is based, if any, are (were) subject to any order(s), permit(s) and/or approval(s) issued by DEP or EPA. If the box is checked, you MUST attach a statement identifying the applicable provisions thereof.

LSP Name: William R. Swanson LSP #: 6406 Stamp:

Telephone: 617-452-6000 Ext.: 6274

FAX: (optional) 617-452-8000

Signature: William R Swanson

Date: 12/7/00

COMMONWEALTH OF MASSACHUSETTS WILLIAM R. SWANSON No. 6406 REGISTERED LICENSED SITE PROFESSIONAL

J. PERSON MAKING SUBMITTAL: (For Transfer Submittals describe person currently undertaking response actions, not transferee)

Name of Organization: Buckley & Mann, Inc.

Name of Contact: Richard Mann/ Stephen Mann Title: Owners

Street: 14 Bush Pond Lane

City/Town: Norfolk State: MA ZIP Code: 02056-0000

Telephone: 781-821-0029 Ext.: 3427 FAX: (optional)

K. RELATIONSHIP TO DISPOSAL SITE OF PERSON MAKING SUBMITTAL: (check one)

☑ RP or PRP Specify: ◉ Owner ○ Operator ○ Generator ○ Transporter Other RP or PRP:

☐ Fiduciary, Secured Lender or Municipality with Exempt Status (as defined by M.G.L. c. 21E, s. 2)

☐ Agency or Public Utility on a Right of Way (as defined by M.G.L. c. 21E, s. 5(j))

☐ Any Other Person Making Submittal Specify Relationship:

L. CERTIFICATION OF PERSON MAKING SUBMITTAL:

I, Richard Mann, attest under the pains and penalties of perjury (i) that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this transmittal form, (ii) that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained in this submittal is, to the best of my knowledge and belief, true, accurate and complete, and (iii) that I am fully authorized to make this attestation on behalf of the entity legally responsible for this submittal. I/the person or entity on whose behalf this submittal is made am/is aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information.

By: (signature) Title: TREASURER

For: Buckley & Mann, Inc. Date: 12/13/00
(print name of person or entity recorded in Section J)

Enter address of the person providing certification(s), including Ability and Willingness Certification where applicable, if different from address recorded in Section J:

Street:

City/Town: State: ZIP Code:

Telephone: Ext.: FAX: (optional)

YOU MUST COMPLETE ALL RELEVANT SECTIONS OF THIS FORM OR DEP MAY RETURN THE DOCUMENT AS INCOMPLETE. IF YOU SUBMIT AN INCOMPLETE FORM, YOU MAY BE PENALIZED FOR MISSING A REQUIRED DEADLINE, AND YOU MAY INCUR ADDITIONAL COMPLIANCE FEES.

MCP TIER II EXTENSION REPORT
for
BUCKLEY & MANN, INC., NORFOLK, MASSACHUSETTS

BUREAU OF WASTE SITE CLEAN-UP SITE NUMBER 3-0173

The third year of the Tier II extension for this site expires on February 22, 2001.

This report describes the progress made over the last 12 months and plans to complete remediation at the site.

The following work was completed during the 2000 Tier II extension period:

- Sampling and analysis of soil and groundwater in the bottom of the former dyehouse Lagoons #1 and #2 in October 2000, as described in the attached letter report. A second round of groundwater samples was collected in December 2000, but the results were not yet available when this Tier II Extension was prepared.

The following tasks remain to complete the work in 2001:

- Obtain a Certificate of Compliance from the Norfolk Conservation Commission.

- Evaluate the results of the second set of groundwater samples from the two former dyehouse wastewater treatment lagoons for PAH compounds. Based on the analytical results, determine what actions, if any, would be needed to reach a Response Action Outcome for the lagoons.

- Complete an Activity and Use Limitation and file the appropriate completion reports with the Department of Environmental Protection.

CDM Camp Dresser & McKee Inc.

consulting, engineering construction operations

One Cambridge Place
50 Hampshire Street
Cambridge, Massachusetts 02139
Tel: 617 452-6000 Fax: 617 452-8000

November 3, 2000

Messrs. Richard and Stephen Mann
Buckley & Mann, Inc.
14 Bush Pond Road
Norfolk, Massachusetts 02056

Subject: Soil and Groundwater Analyses

Dear Dick and Steve:

Camp Dresser & McKee Inc. (CDM) is pleased to present the results of the recent soil and groundwater sampling and analyses for the Buckley & Mann, Inc. (B&M) property at 17 Lawrence Street, Norfolk, Massachusetts. CDM collected four soil and four groundwater samples from the former Dyehouse Wastewater Lagoons on October 3, 2000. The samples were analyzed by Alpha Analytical Laboratory for polyaromatic hydrocarbons and related "extractable" (under base-neutral conditions) parameters. These parameters were selected because comprehensive analyses in 1995 showed that concentrations of other constituents (metals, volatile organic compounds, etc.) were either absent (at analytical detection limits), or present at less than regulated limits.

MCP nomenclature and classifications

Under Massachusetts Contingency Plan (MCP) definitions, the groundwater at B&M is classified GW-1 and GW-3. The soil is classified S-1. CDM uses the term *soil*, rather than *sediment*, because the Lagoons are man-made and the bottoms were graded with sand and gravel during construction and in the case of Lagoon #1, subsequent maintenance. The soil on the bottom is not naturally deposited sediment like that found in ponds.

For this report, CDM used the standardized MCP Method 1 risk assessment procedure to evaluate the soil and groundwater data.

1. *Groundwater*

The groundwater is classified GW-1 because Wretham designated the entire Mill River watershed upgradient of the Town's wells as Zone II (potentially contributing to the well water), and because the B&M property is not serviced by public water, and may have residential water wells in the future. By MCP definition, all groundwater is also GW-3 because it eventually discharges to surface water.

2. *Soil*

The S-1 designation means that the soil is in within three feet of the surface and is accessible either now, or under foreseeable future conditions. The S-1/GW-1 soil standard includes consideration of both human exposure (direct contact) and leaching to

groundwater. The S-1/GW-3 soil standard is controlled more by potential for leaching of soluble components, but includes a 10 fold dilution for the leaching component prior to comparison with surface water quality standards.

3. *"Unlisted" Chemicals*

The MCP requires consideration of all chemical residues present at the site. For complex mixtures like fuel (gasoline, diesel, etc.), MCP sets Method 1 standards for groups of similar compounds. This approach would also apply to the hydrocarbon dye carriers used at B&M prior to termination of dyeing operations in 1986. For the B&M site, the applicable fractions are:

- Aliphatic hydrocarbons with 9 to 18 carbons.
- Aliphatic hydrocarbons with 19 to 36 carbons (this fraction may record plant waxes from tree leaves, etc., as well as petroleum compounds).
- Aromatic hydrocarbons with 11 to 22 carbons.

Individual unlisted compounds must also be evaluated in some cases. CDM anticipates that a standard for 1-methylnaphthalene, found in the recent and previous analyses, would be similar to the MCP standard for 2-methylnaphthalene, or that the concentrations could be added and considered a single compound.

Sample Preparation and Analytical Methods

Soil samples were collected from hand dug pits in the Lagoons, as described in the attached field notes. Figure 1 shows the locations for each sample, and the extent of standing water in Lagoons at the time of sampling. Composite samples from equal volumes of pits A/B and C/D were made in each Lagoon.

Water from each test pit was bailed to waste prior to collecting samples of freshly infiltrated water. The groundwater samples all contained suspended solids (up to 10 percent of the volume of the bottle) and two remained turbid even after settling overnight. The laboratory was instructed to decant the samples and avoid extracting the portion with the suspended solids. The samples were not clarified by filtration, to avoid adsorbing sparingly soluble target PAH compounds on the filter paper. For these samples, with significant suspended solids (which also adsorb PAH), the results represent the upper bound of "soluble" PAH compounds.

After discussions with the laboratory, CDM elected to analyze the groundwater by Method 8270 SIM. The procedure involves extracting the sample with hexane, clean-up, and then analysis by gas chromatography with a mass spectrometer detector. The SIM ("selective ion mass spectroscopy") designation means that the detector is programmed to focus on selected masses, rather than scanning the entire mass range. This procedure improves sensitivity sufficiently to measure certain PAH compounds at concentrations

equal to (or less than) the MCP standards, although other compounds normally reported by the same method are not measured.

Analytical Results

Tables 1 through 3 summarize the results for Groundwater, Lagoon #1 soils and Lagoon #2 soils, respectively.

1. *Groundwater*

Methyl naphthalenes. The Lagoon #1 A/B sample contained 16 µg/L 2-methylnaphthalene, slightly above the 10 µg/L standard. The Lagoon #1 C/D sample contained less than 10 µg/L standard, but the sum of the 1-methyl and 2-methyl naphthalenes exceeded the 10 µg/L limit. The concentrations of these compounds in water from Lagoon #2 were below the standard.

Other PAH compounds. The concentrations of other compounds in this group were below their respective MCP standards. 1,1-Biphenyl, found in soil (see below), was not analyzed in the groundwater samples because this compound is not on the target list for the SIM procedure.

2. *Soil*

Base neutral extractable compounds (including PAH) and Extractable Petroleum Hydrocarbons. The results show that traces of hydrocarbon dye carrier compounds remain in the Lagoons bottom soils. The soil concentration of biphenyl in three of four samples slightly exceeded the MCP S-1/GW-1 limit. The concentrations ranged from 1.6 to 2.6 mg/kg, relative to the 1.0 mg/kg standard. No other individual compound and none of the Extractable Petroleum Hydrocarbon ranges exceeded the MCP standards.

Analytical methods have evolved over the last 15 years and consequently, results from prior analyses are not strictly comparable to the October 2000 results. Nevertheless, the data suggest a gradual decline in the concentration of the target compounds in the soil. This was anticipated, based on experience at other sites and the bench scale degradation tests conducted at B&M in the late 1980s.

With an Activity and Use Limitation (AUL), to require proper management of any soil excavated from the Lagoons in the future, the soil concentrations are low enough to allow "closure" under the Massachusetts Contingency Plan. Future excavation in the Lagoons is unlikely in any event, as the Lagoons are close to the Tail Race and subject to Massachusetts and Town regulations under the provisions of the various Wetland laws. Closure with an AUL would be subject to resolution of the groundwater quality issue, as explained below.

Recommendation for Additional Groundwater Sampling

The MCP prohibits modification or exception to the GW-1 standard. Hence, consideration of contaminant dilution and/or exposure control to reduce the calculated risk are not allowed. Consequently, CDM recommends that a new set of groundwater samples, processed prior to analysis to completely remove suspended solids with their adsorbed PAH and other hydrocarbons. This would eliminate interference from compounds adsorbed on particulates, which do not move with the groundwater.

For these tests, CDM would process the samples, rather than relying on the laboratory to remove the suspended solids. The samples would be settled overnight, and decanted if clear. A small dose of alum coagulant would be added to samples which do not fully clarify, and then the samples would be resettled. If necessary, the samples would be centrifuged to allow decant of clear supernate for analysis.

A total of four clarified groundwater samples would be analyzed for the target PAH compounds by Method 8270 SIM, and for a complete base neutral extractable scan. The latter would include biphenyl.

Per our telephone conversation on November 1, 2000, CDM will proceed with the above sampling and analysis program.

Possible Outcomes for Groundwater

If the results from the groundwater resampling show that the concentrations of target compounds are less than the MCP Method 1 standards, no further work would be needed, other than the installation of an Activity and Use Limitation for future excavation of the soils. If the analyses find concentration above the Method 1 limits, CDM would recommend that the soils in the Lagoon(s) be excavated into wind-rows in the Lagoons and fertilized to accelerate aerobic biodegradation of the remaining hydrocarbons.

If you have any questions, please contact me at (617) 452-6267.

Very truly yours,

CAMP DRESSER & McKEE INC.

Robert A. Dangel
Licensed Site Professional

Approved:

William R. Swanson
Licensed Site Professional

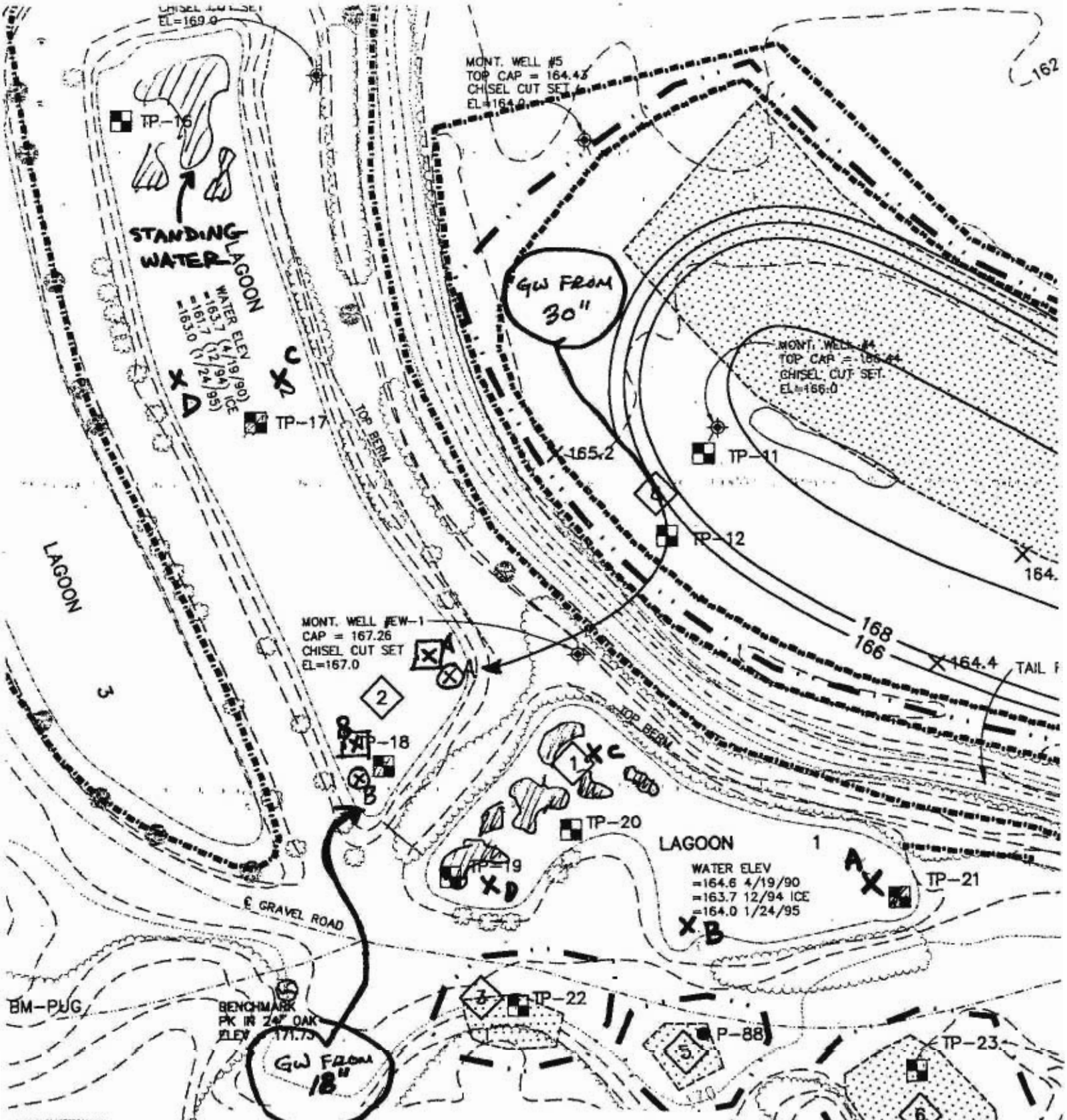

FIGURE 1

SOIL AND GROUNDWATER SAMPLES
COLLECTED 2 OCT 00 FROM
FORMER DYEHOUSE WASTEWATER LAGOONS
BUCKLEY & MANN, INC.

X SOIL AND GROUNDWATER

(X) GROUNDWATER ONLY

[X] SOIL

TABLE 1

GROUNDWATER ANALYSES FROM FORMER DYEHOUSE WASTEWATER TREATMENT LAGOONS #1 AND #2

Settled and decanted, but not filtered samples. All results in ug/L.

	MCP Method 1 Standard		Lagoon 1	Lagoon 1	Lagoon 2	Lagoon 2
	GW-1	GW-3	GW-1-AB	GW-1-CD	GW-2-AB	GW-2-CD
Polynuclear Aromatic Compounds						
Acenaphthene	20	5000	17	8	6.8	1.1
2-Chloronaphthalene	NL	NL	0.54	<0.14	<0.12	<0.2
Fluoranthene	300	200	<0.2	<0.14	<0.12	<0.2
Naphthalene	20	6000	13	2.1	1.6	<0.2
Benzo(a)anthracene	1	3000	<0.2	<0.14	<0.12	<0.2
Benzo(a)pyrene	0.2	3000	<0.2	<0.14	<0.12	<0.2
Benzo(b)fluoranthene	1	3000	<0.2	<0.14	<0.12	<0.2
Benzo(k)fluoranthene	1	3000	<0.2	<0.14	<0.12	<0.2
Chrysene	2	3000	<0.2	<0.14	<0.12	<0.2
Acenaphthylene	300	3000	<0.2	<0.14	<0.12	<0.2
Anthracene	2000	3000	<0.2	<0.14	<0.12	<0.2
Benzo(ghi)peryiene	300	3000	<0.2	<0.14	<0.12	<0.2
Fluorene	300	3000	1.1	1.2	1.8	<0.2
Phenanthrene	300	50	<0.2	0.2	<0.12	<0.2
Dibenzo(a,h)anthracene	0.5	3000	<0.2	<0.14	<0.12	<0.2
Indeno(1,2,3-cd)Pyrene	0.5	3000	<0.2	<0.14	<0.12	<0.2
Pyrene	200	3000	<0.2	<0.14	<0.12	<0.2
1-Methylnaphthalene	NL	NL	9.7	6.9	5	<0.2
2-Methylnaphthalene	10	3000	**16**	7.3	<0.12	<0.2
Perylene	200	3000	<0.2	<0.14	<0.12	<0.2
Benzo(e)Pyrene	NL	NL	<0.2	<0.14	<0.12	<0.2

Legend

ND, Not Detected

NL, Value Not Listed

Notes

1. Concentration in boxes exceeds at least one of the criteria listed MCP Standard.
2. If a compound was not detected in a sample, then the detection limit is shown next to the less-than symbol.
3. Analyses by Method 8270, with selective ion mass spectroscopy to achieve lower detection limits for target PAH compounds

Samples collected from shallow test pits on October 2, 2000

TABLE 2

SOIL ANALYSES FROM FORMER DYEHOUSE WASTEWATER TREATMENT LAGOON #1
BUCKLEY AND MANN, INC., NORFOLK, MA
All results in mg/kg

	MCP Method 1 Standards		1986 Data	1986 Data	1995 Data	1995 Data	1995 Data	2000 Data	2000 Data
	S-1/GW-1	S-1/GW-3	SS-4	SS-4A	BM-TP19-L1-N1	BM-TP20-L1-C1	BM-TP21-L1-S1	LS-1-AB	LS-1-CD
Acid/Base Neutral Compounds or Polynuclear Aromatic Compounds, depending on analytical date									
Carbazole	NL	NL			< 0.77	< 1.9	< 0.37		
2-methylnaphthalene	4.0	500	11.5	13	9.2	33	4.3	1.2	0.62
1-methylnaphthalene	NL	NL						< 1.1	0.65
Naphthalene	4.0	100	10	8.7	2.9	9.2	1.1	< 1.1	< 0.57
Acenaphthene	20	1,000			1.6	6.1	1.5	1.4	1.3
Acenaphthylene	100	100			< 0.39	< 0.96	< 0.19	< 1.1	< 0.57
Fluorene	400	1,000			0.69	1.5	0.77	< 1.1	0.7
Anthracene	1,000	1,000			< 0.39	< 0.96	< 0.19	< 1.1	< 0.57
Fluoranthene	1,000	1,000			< 0.39	< 0.96	< 0.19	< 1.1	< 0.57
Hexachlorobenzene	0.70	0.70			< 0.39	< 0.96	< 0.19		
Phenanthrene	700	100			< 0.39	< 0.96	0.35		
1,2,4-trichlorobenzene	100	400			5.4	11	1.1		
Dibenzofuran	NL	NL			1.3	3.8	0.93		
Diethylphthalate	100	0.70			< 0.39	< 0.96	< 0.96		
Bis(2-ethylhexyl)phthalate	100	200			< 0.39	< 0.96	< 0.96		
Benzo(a)anthracene	0.7	0.7			< 0.39	< 0.96	< 0.96	< 1.1	< 0.57
Chrysene	07	07			< 0.39	< 0.96	< 0.96	< 1.1	< 0.57
Pyrene	700	700			< 0.39	< 0.96	< 0.96	< 1.1	< 0.57
Benzo(b)fluoranthene	0.7	0.7			< 0.39	< 0.96	< 0.96	< 1.1	< 0.57
Benzo(k)fluoranthene	0.7	0.7			< 0.39	< 0.96	< 0.96	< 1.1	< 0.57
Benzo(g,h,i)perylene	1,000	1,000			< 0.39	< 0.96	< 0.96		
Benzo(a)pyrene	0.7	0.7			< 0.39	< 0.96	< 0.96	< 1.1	< 0.57
Indeno(1,2,3-cd)pyrene	0.7	0.7			< 0.39	< 0.96	< 0.96	< 1.1	< 0.57
Dibenzo(a,h)anthracene	0.7	0.7			< 0.39	< 0.96	< 0.96	< 1.1	< 0.57
1,1-Biphenyl	1	100	23	29				2.6	2.5
Extractable Petroleum Hydrocarbons									
C9-C-18 Aliphatics	1,000	1,000						< 11.2	< 11.4
C19-C36 Aliphatics	2,500	2,500						24.4	13.3
C11-C22 Aromatics	200	800						< 11.2	< 11.4

Legend
ND, Not Detected
NL, Value Not Listed

Notes
1. Concentration in boxes exceeds at least one of the criteria listed MCP Standard.
2. If a compound was not detected in a sample, then the detection limit is shown next to the less-than symbol.
3. Analyses by Method 8270

1986 Samples collected May 7, 1986
1995 Samples collected October 25-26, 1995.
2000 Samples collected October 2, 2000

TABLE 3

SOIL ANALYSES FROM FORMER DYEHOUSE WASTEWATER TREATMENT LAGOON #2
BUCKLEY AND MANN, INC., NORFOLK, MA
All results in mg/kg

	MCP Method 1 Standards		1995 Data	1995 Data	1995 Data	1995 Data	1995 Data	1995 Data	2000 Data	2000 Data
	S-1/GW-1	S-1/GW-3	BM-TP16-L2-NOR1	BM-TP18-L2-NOR2	BM-TP17-L2-C1	BM-TP17-L2-C2	BM-TP18-L2-S1	BM-TP16-L2-S2	LS-2-AB	LS-2-CD
Acid/Base Neutral Compounds or Polynuclear Aromatic Compounds, depending on analytical date										
Carbazole	NL	NL	< 1.8	< 0.36	< 2.3	< 0.41	< 0.37	< 0.73		
2-methylnaphthalene	4.0	500	2.5	1.5	< 1.1	< 0.20	< 0.18	4.6	< 0.59	< 1.50
1-methylnaphthalene	NL	NL							< 0.59	< 1.50
Naphthalene	4.0	100	< 0.89	0.23	< 1.1	< 0.20	< 0.18	1.0	< 0.59	< 1.50
Acenaphthene	20	1,000	1.5	0.87	< 1.1	< 0.20	< 0.18	1.7	< 0.59	< 1.50
Acenaphthylene	100	100	< 0.89	< 0.18	< 1.1	< 0.20	< 0.18	< 0.36	< 0.59	< 1.50
Fluorene	400	1,000	< 0.89	0.52	< 1.1	< 0.20	< 0.18	0.69	< 0.59	< 1.50
Anthracene	1,000	1,000	< 0.89	< 0.18	< 1.1	< 0.20	< 0.18	< 0.36	< 0.59	< 1.50
Fluoranthene	1,000	1,000	< 0.89	< 0.18	< 1.1	< 0.20	< 0.18	< 0.36	< 0.59	< 1.50
Hexachlorobenzene	0.70	0.70	< 0.89	< 0.18	< 1.1	< 0.20	< 0.18	< 0.36		
Phenanthrene	700	100	< 0.89	0.32	< 1.1	< 0.20	< 0.18	< 0.36		
1,2,4-trichlorobenzene	100	400	< 0.89	< 0.18	< 1.1	< 0.20	< 0.18	0.54		
Dibenzofuran	NL	NL	0.93	0.71	< 1.1	< 0.20	< 0.18	0.79		
Diethylphthalate	100	0.70	< 0.89	0.22	< 1.1	< 0.20	< 0.18	< 0.36		
Bis(2-ethylhexyl)phthalate	100	200	< 0.89	< 0.18	< 1.1	< 0.20	< 0.18	< 0.36		
Benzo(a)anthracene	0.7	0.7	< 0.89	< 0.18	< 1.1	< 0.20	< 0.18	< 0.36	< 0.59	< 1.50
Chrysene	07	07	< 0.89	< 0.18	< 1.1	< 0.20	< 0.18	< 0.36	< 0.59	< 1.50
Pyrene	700	700	< 0.89	< 0.18	< 1.1	< 0.20	< 0.18	< 0.36	< 0.59	< 1.50
Benzo(b)fluoranthene	0.7	0.7	< 0.89	< 0.18	< 1.1	< 0.20	< 0.18	< 0.36	< 0.59	< 1.50
Benzo(k)fluoranthene	0.7	0.7	< 0.89	< 0.18	< 1.1	< 0.20	< 0.18	< 0.36	< 0.59	< 1.50
Benzo(g,h,i)perylene	1,000	1,000	< 0.89	< 0.18	< 1.1	< 0.20	< 0.18	< 0.36		
Benzo(a)pyrene	0.7	0.7	< 0.89	< 0.18	< 1.1	< 0.20	< 0.18	< 0.36	< 0.59	< 1.50
Indeno(1,2,3-cd)pyrene	0.7	0.7	< 0.89	< 0.18	< 1.1	< 0.20	< 0.18	< 0.36	< 0.59	< 1.50
Dibenzo(a,h)anthracene	0.7	0.7	< 0.89	< 0.18	< 1.1	< 0.20	< 0.18	< 0.36	< 0.59	< 1.50
1,1-Biphenyl	1	100							< 0.59	1.6
Extractable Petroleum Hydrocarbons										
C9-C-18 Aliphatics	1,000	1,000							16.0	106
C19-C36 Aliphatics	2,500	2,500							31.0	644
C11-C22 Aromatics	200	800							< 11.8	157

Legend
ND, Not Detected
NL, Value Not Listed

Notes
1. Concentration in boxes exceeds at least one of the criteria listed MCP Standard.
2. If a compound was not detected in a sample, then the detection limit is shown next to the less-than symbol.
3. Analyses by Method 8270

1986 Samples collected May 7, 1986
1995 Samples collected October 25-26, 1995.
2000 Samples collected October3, 2000

CDM Camp Dresser & McKee Inc.

Memorandum

To: *Robert Dangel*

From: *Brendan MacDonald*

Date: *October 3, 2000*

Subject: *Buckley & Mann; Lagoons 1 & 2 Sampling Event*

On October 2, 2000 CDM field personnel collected subsurface soil and groundwater samples from Lagoons 1 and 2. The following text describes the procedures utilized and the samples collected. The attached figure shows the sampling locations. The attached spreadsheet shows soil types encountered.

Subsurface Soil Sampling

Four soil samples (LS-1-A, LS-1-B, LS-1-C, LS-1-D) were collected from Lagoon 1. At each sampling location, holes were dug to 12" below ground surface using a shovel and, as necessary, a post-hole digger. Soil was collected with a stainless steel spoon from depths of 6" and 12" below ground surface (bgs). Sampling equipment was decontaminated (Alconox/DeI-DeI-MeOH-DeI) prior to sample collection at each location. Samples LS-1-A and LS-1-B were composited in a stainless steel bowl, placed in an amber glass jar, and renamed LS-1-AB. Samples LS-1-C and LS-1-D were composited in a stainless steel bowl, placed in an amber glass jar, and renamed LS-1-CD. Soil samples were sent to Alpha Analytical Laboratories for MADEP EPH "standard" analysis and PAH analysis via Method 8270C.

Four soil samples (LS-2-A, LS-2-B, LS-2-C, LS-2-D) were collected from Lagoon 2. At each sampling location, holes were dug to 12" below ground surface using a shovel and, as necessary, a post-hole digger. The soils encountered at LS-2-A and LS-2-B were dry, therefore the holes were dug further, to a depth of 18". Soil was collected with a stainless steel spoon from depths of 6" and 12" below ground surface (bgs) from LS-2-C and LS-2-D, and from depths of 6" and 18" below ground surface (bgs) from LS-2-A and LS-2-B. Sampling equipment was decontaminated (Alconox/DeI-DeI-MeOH-DeI) prior to sample collection at each location. Samples LS-2-A and LS-2-B were composited in a stainless steel bowl, placed in an amber glass jar, and renamed LS-2-AB. Samples LS-2-C and LS-2-D were composited in a stainless steel bowl, placed in an amber glass jar, and renamed LS-

2-CD. Soil samples were sent to Alpha Analytical Laboratories for MADEP EPH "standard" analysis and PAH analysis via Method 8270C.

Groundwater Sampling

Two composite groundwater samples (GW-1-AB and GW-1-CD) were collected from Lagoon 1. At each of the four soil sampling locations in Lagoon 1, groundwater entered the holes from the sides of the excavation. Standing groundwater was evacuated from each location with a pond sampler, and newly infiltrated groundwater was then collected with the sampler and placed in 1-liter amber glass bottles. Both of the bottles filled per composite sample GW-1-AB received ½-liter of groundwater each from both soil sampling locations LS-1-A and LS-1-B. Both of the bottles filled per composite sample GW-1-CD received ½-liter of groundwater each from both soil sampling locations LS-1-C and LS-1-D.
Two composite groundwater samples (GW-2-AB and GW-2-CD) were collected from Lagoon 2. At two of the four soil sampling locations in Lagoon 2, groundwater entered the holes from the sides of the excavation. The holes at locations LS-2-A and LS-2-B were moved towards the lagoon edges and redug as no groundwater had entered the excavations. LS-2-A was ultimately excavated to 2 feet 10 inches in order to collect groundwater, while LS-2-B was excavated to 2 feet. Standing groundwater was evacuated from each location with a pond sampler, and newly infiltrated groundwater was then collected with the sampler and placed in 1-liter amber glass bottles. Both of the bottles filled per composite sample GW-2-AB received ½-liter of groundwater each from both soil sampling locations LS-2-A and LS-2-B. Both of the bottles filled per composite sample GW-2-CD received ½-liter of groundwater each from both soil sampling locations LS-2-C and LS-2-D.

Sampling equipment was decontaminated (Alconox/DeI-DeI-MeOH-DeI) prior to sample collection at each location. All groundwater samples were sent to Alpha Analytical Laboratories, with a request to analyze (decanted water) for PAH at low concentrations via Method 8270C-SIM.

cc: Michael Guidice w/ attachments
Project File w/ attachments

SUBSURFACE SOIL SAMPLING IN LAGOONS 1 & 2 OCTOBER 2, 2000
BUCKLEY AND MANN, INC., NORFOLK, MASSACHUSETTS

	Subsurface Soil Sampling Locations									
	Lagoon 1				Lagoon 2					
Depth (bgs)	A	B	C	D	A	A*	B	B*	C	D
0	dk brn org SILT	dk brn org SILT	light brown	light brown	dk brn org SILT	dk brn org SILT	dk brn org SILT	dk brn org SILT	blk org PEAT	blk org PEAT
2"	tr leaves, dry	tr leaves, dry	fine to medium	fine to medium	tr leaves, dry	tr leaves, dry	tr leaves, dry	tr leaves, dry	tr org/grass	tr org/grass
4"	lt brn m to f S	lt brn m to f S	SAND	SAND		light brown		light brown	moist	moist
6"	tr f to m g	tr f to m g	trace	trace	lt brn m to f S	fine to medium	lt brn m to f S	fine to medium	lt brn m to f S	lt brn m to f S
8"			fine to medium	fine to medium	tr f to m g	SAND	tr f to m g	SAND	tr f to m g	tr f to m g
10"			gravel	gravel	light blue/grey	trace		trace		
12"	wet @ 2"	wet @ 2"	wet @ 2"	wet @ 2"	fine to medium	fine to medium	dry	fine to medium	wet @ 4"	wet @ 2"
14"					SAND	gravel		gravel		
16"					dense					
18'					dry					
20"										
22"								wet @ 22"		
24"										
26"										
28"										
30"										
32"										
34"						wet @ 34"				

* Associated groundwater sampling location; no soil sample collected from starred locations.

ALPHA ANALYTICAL LABORATORIES

Eight Walkup Drive
Westborough, Massachusetts 01581-1019
(508) 898-9220

MA:M-MA-086 NH:200395-B/C CT:PH-0574 ME:MA086 RI:65 NY:11148

CERTIFICATE OF ANALYSIS

Client: Camp Dresser & McKee, Inc.

Address: 1 Cambridge Place
50 Hampshire Street
Cambridge, MA 02139

Attn: Bob Dangel

Project Number: 1121-25944-GS.LAGN

Site: BUCKLEY & MANN

Laboratory Job Number: L0008913

Invoice Number: 42392

Date Received: 04-OCT-00

Date Reported: 16-OCT-00

Delivery Method: Alpha

ALPHA SAMPLE NUMBER	CLIENT IDENTIFICATION	SAMPLE LOCATION
L0008913-01	GW-1-AB	NORFOLK, MA
L0008913-02	GW-1-CD	NORFOLK, MA
L0008913-03	GW-2-AB	NORFOLK, MA
L0008913-04	GW-2-CD	NORFOLK, MA
L0008913-05	LS-1-AB	NORFOLK, MA
L0008913-06	LS-1-CD	NORFOLK, MA
L0008913-07	LS-2-AB	NORFOLK, MA
L0008913-08	LS-2-CD	NORFOLK, MA

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized by: _____

Scott McLean - Laboratory Director

ALPHA ANALYTICAL LABORATORIES
NARRATIVE REPORT

Laboratory Job Number: L0008913

Alpha Job L0008913

Polynuclear Aromatic Hydrocarbons

Please note that Alpha Samples L0008913-01 through -04 were decanted prior to extraction for the analysis of PAHs by EPA Method 8270C-SIM.

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA-086 NH:200395-B/C CT:PH-0574 ME:MA086 RI:65

Laboratory Sample Number: L0008913-01
GW-1-AB
Sample Matrix: WATER

Date Collected: 02-OCT-2000
Date Received : 04-OCT-2000
Date Reported : 16-OCT-00

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 2-Amber

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATES PREP	DATES ANALYSIS	ID
PAH by GC/MS SIM 8270M				1	8270C-M	06-Oct	13-Oct	MK
Acenaphthene	17.	ug/l	0.20					
2-Chloronaphthalene	0.54	ug/l	0.20					
Fluoranthene	ND	ug/l	0.20					
Naphthalene	13.	ug/l	0.20					
Benzo(a)anthracene	ND	ug/l	0.20					
Benzo(a)pyrene	ND	ug/l	0.20					
Benzo(b)fluoranthene	ND	ug/l	0.20					
Benzo(k)fluoranthene	ND	ug/l	0.20					
Chrysene	ND	ug/l	0.20					
Acenaphthylene	ND	ug/l	0.20					
Anthracene	ND	ug/l	0.20					
Benzo(ghi)perylene	ND	ug/l	0.20					
Fluorene	1.1	ug/l	0.20					
Phenanthrene	ND	ug/l	0.20					
Dibenzo(a,h)anthracene	ND	ug/l	0.20					
Indeno(1,2,3-cd)Pyrene	ND	ug/l	0.20					
Pyrene	ND	ug/l	0.20					
1-Methylnaphthalene	9.7	ug/l	0.20					
2-Methylnaphthalene	16.	ug/l	0.20					
Perylene	ND	ug/l	0.20					
Benzo(e)Pyrene	ND	ug/l	0.20					
Surrogate Recovery								
Nitrobenzene-d5	81.0	%						
2-Fluorobiphenyl	78.0	%						
4-Terphenyl-d14	79.0	%						

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA-086 NH:200395-B/C CT:PH-0574 ME:MA086 RI:65

Laboratory Sample Number: L0008913-02
GW-1-CD
Sample Matrix: WATER

Date Collected: 02-OCT-2000
Date Received : 04-OCT-2000
Date Reported : 16-OCT-00

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 2-Amber

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATES PREP	DATES ANALYSIS	ID
PAH by GC/MS SIM 8270M				1	8270C-M	06-Oct	11-Oct	MK
Acenaphthene	8.0	ug/l	0.14					
2-Chloronaphthalene	ND	ug/l	0.14					
Fluoranthene	ND	ug/l	0.14					
Naphthalene	2.1	ug/l	0.14					
Benzo(a)anthracene	ND	ug/l	0.14					
Benzo(a)pyrene	ND	ug/l	0.14					
Benzo(b)fluoranthene	ND	ug/l	0.14					
Benzo(k)fluoranthene	ND	ug/l	0.14					
Chrysene	ND	ug/l	0.14					
Acenaphthylene	ND	ug/l	0.14					
Anthracene	ND	ug/l	0.14					
Benzo(ghi)perylene	ND	ug/l	0.14					
Fluorene	1.2	ug/l	0.14					
Phenanthrene	0.20	ug/l	0.14					
Dibenzo(a,h)anthracene	ND	ug/l	0.14					
Indeno(1,2,3-cd)Pyrene	ND	ug/l	0.14					
Pyrene	ND	ug/l	0.14					
1-Methylnaphthalene	6.9	ug/l	0.14					
2-Methylnaphthalene	7.3	ug/l	0.14					
Perylene	ND	ug/l	0.14					
Benzo(e)Pyrene	ND	ug/l	0.14					
Surrogate Recovery								
Nitrobenzene-d5	93.0	%						
2-Fluorobiphenyl	86.0	%						
4-Terphenyl-d14	43.0	%						

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA-086 NH:200395-B/C CT:PH-0574 ME:MA086 RI:65

Laboratory Sample Number: L0008913-03
GW-2-AB
Sample Matrix: WATER

Date Collected: 02-OCT-2000
Date Received : 04-OCT-2000
Date Reported : 16-OCT-00

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 2-Amber

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATES PREP	DATES ANALYSIS	ID
PAH by GC/MS SIM 8270M				1	8270C-M	06-Oct	11-Oct	MK
Acenaphthene	6.8	ug/l	0.12					
2-Chloronaphthalene	ND	ug/l	0.12					
Fluoranthene	ND	ug/l	0.12					
Naphthalene	1.6	ug/l	0.12					
Benzo(a)anthracene	ND	ug/l	0.12					
Benzo(a)pyrene	ND	ug/l	0.12					
Benzo(b)fluoranthene	ND	ug/l	0.12					
Benzo(k)fluoranthene	ND	ug/l	0.12					
Chrysene	ND	ug/l	0.12					
Acenaphthylene	ND	ug/l	0.12					
Anthracene	ND	ug/l	0.12					
Benzo(ghi)perylene	ND	ug/l	0.12					
Fluorene	1.8	ug/l	0.12					
Phenanthrene	ND	ug/l	0.12					
Dibenzo(a,h)anthracene	ND	ug/l	0.12					
Indeno(1,2,3-cd)Pyrene	ND	ug/l	0.12					
Pyrene	ND	ug/l	0.12					
1-Methylnaphthalene	5.0	ug/l	0.12					
2-Methylnaphthalene	ND	ug/l	0.12					
Perylene	ND	ug/l	0.12					
Benzo(e)Pyrene	ND	ug/l	0.12					
Surrogate Recovery								
Nitrobenzene-d5	78.0	%						
2-Fluorobiphenyl	77.0	%						
4-Terphenyl-d14	51.0	%						

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA-086 NH:200395-B/C CT:PH-0574 ME:MA086 RI:65

Laboratory Sample Number: L0008913-04
GW-2-CD
Sample Matrix: WATER

Date Collected: 02-OCT-2000
Date Received : 04-OCT-2000
Date Reported : 16-OCT-00

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 2-Amber

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATES PREP	DATES ANALYSIS	ID
PAH by GC/MS SIM 8270M				1	8270C-M	06-Oct	12-Oct	MK
Acenaphthene	1.1	ug/l	0.20					
2-Chloronaphthalene	ND	ug/l	0.20					
Fluoranthene	ND	ug/l	0.20					
Naphthalene	ND	ug/l	0.20					
Benzo(a)anthracene	ND	ug/l	0.20					
Benzo(a)pyrene	ND	ug/l	0.20					
Benzo(b)fluoranthene	ND	ug/l	0.20					
Benzo(k)fluoranthene	ND	ug/l	0.20					
Chrysene	ND	ug/l	0.20					
Acenaphthylene	ND	ug/l	0.20					
Anthracene	ND	ug/l	0.20					
Benzo(ghi)perylene	ND	ug/l	0.20					
Fluorene	ND	ug/l	0.20					
Phenanthrene	ND	ug/l	0.20					
Dibenzo(a,h)anthracene	ND	ug/l	0.20					
Indeno(1,2,3-cd)Pyrene	ND	ug/l	0.20					
Pyrene	ND	ug/l	0.20					
1-Methylnaphthalene	ND	ug/l	0.20					
2-Methylnaphthalene	ND	ug/l	0.20					
Perylene	ND	ug/l	0.20					
Benzo(e)Pyrene	ND	ug/l	0.20					
Surrogate Recovery								
Nitrobenzene-d5	69.0	%						
2-Fluorobiphenyl	77.0	%						
4-Terphenyl-d14	45.0	%						

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA-086 NH:200395-B/C CT:PH-0574 ME:MA086 RI:65

Laboratory Sample Number: L0008913-05
LS-1-AB
Sample Matrix: SOIL

Date Collected: 02-OCT-2000
Date Received : 04-OCT-2000
Date Reported : 16-OCT-00

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1-Amber

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATES PREP	DATES ANALYSIS	ID
Solids, Total	89.	%	0.10	30	2540G		10-Oct	MA
PNA's by GC/MS 8270				1	8270C	05-Oct	10-Oct	JA
Acenaphthene	1400	ug/kg	1100					
2-Chloronaphthalene	ND	ug/kg	1100					
Fluoranthene	ND	ug/kg	1100					
Naphthalene	ND	ug/kg	1100					
Benzo(a)anthracene	ND	ug/kg	1100					
Benzo(a)pyrene	ND	ug/kg	1100					
Benzo(b)fluoranthene	ND	ug/kg	1100					
Benzo(k)fluoranthene	ND	ug/kg	1100					
Chrysene	ND	ug/kg	1100					
Acenaphthylene	ND	ug/kg	1100					
Anthracene	ND	ug/kg	1100					
Benzo(ghi)perylene	ND	ug/kg	1100					
Fluorene	ND	ug/kg	1100					
Phenanthrene	ND	ug/kg	1100					
Dibenzo(a,h)anthracene	ND	ug/kg	1100					
Indeno(1,2,3-cd)pyrene	ND	ug/kg	1100					
Pyrene	ND	ug/kg	1100					
Benzo(e)pyrene	ND	ug/kg	1100					
Biphenyl	2600	ug/kg	1100					
Perylene	ND	ug/kg	1100					
1-Methylnaphthalene	ND	ug/kg	1100					
2-Methylnaphthalene	1200	ug/kg	1100					
Surrogate Recovery								
Nitrobenzene-d5	84.0	%						
2-Fluorobiphenyl	79.0	%						
4-Terphenyl-d14	84.0	%						

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0008913-05
LS-1-AB

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATES PREP	DATES ANALYSIS	ID
Extractable Petroleum Hydrocarbons				46	98-1	06-Oct	11-Oct	HL

Quality Control Information

Condition of sample received: Satisfactory
Sample temperature upon receipt: Received on Ice
Sample extraction method: Extracted Per the Method
Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? YES
Were significant modifications made to the method as specified in Sect 11.3? NO
Please note to subtract the method blank from the stated result.
The normal acceptance range for the extraction surrogates, Chloro-octadecane and o-Terphenyl, is 40-140%.
The normal acceptance range for the fractionation surrogates, 2-Fluorobiphenyl and 2-Bromonaphthalene, is 40-140%.

C9-C18 Aliphatics	ND	mg/kg	11.2
C19-C36 Aliphatics	24.4	mg/kg	11.2
C11-C22 Aromatics	ND	mg/kg	11.2

Surrogate Recovery

Chloro-Octadecane	63.0	%
o-Terphenyl	67.0	%
2-Fluorobiphenyl	94.0	%
2-Bromonaphthalene	88.0	%

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA-086 NH:200395-B/C CT:PH-0574 ME:MA086 RI:65

Laboratory Sample Number: L0008913-06
LS-1-CD
Sample Matrix: SOIL

Date Collected: 02-OCT-2000
Date Received : 04-OCT-2000
Date Reported : 16-OCT-00

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1-Amber

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATES PREP	DATES ANALYSIS	ID
Solids, Total	88.	%	0.10	30	2540G		10-Oct	MA
PNA's by GC/MS 8270				1	8270C	05-Oct	10-Oct	JA
Acenaphthene	1300	ug/kg	570					
2-Chloronaphthalene	ND	ug/kg	570					
Fluoranthene	ND	ug/kg	570					
Naphthalene	ND	ug/kg	570					
Benzo(a)anthracene	ND	ug/kg	570					
Benzo(a)pyrene	ND	ug/kg	570					
Benzo(b)fluoranthene	ND	ug/kg	570					
Benzo(k)fluoranthene	ND	ug/kg	570					
Chrysene	ND	ug/kg	570					
Acenaphthylene	ND	ug/kg	570					
Anthracene	ND	ug/kg	570					
Benzo(ghi)perylene	ND	ug/kg	570					
Fluorene	700	ug/kg	570					
Phenanthrene	ND	ug/kg	570					
Dibenzo(a,h)anthracene	ND	ug/kg	570					
Indeno(1,2,3-cd)pyrene	ND	ug/kg	570					
Pyrene	ND	ug/kg	570					
Benzo(e)pyrene	ND	ug/kg	570					
Biphenyl	2500	ug/kg	570					
Perylene	ND	ug/kg	570					
1-Methylnaphthalene	650	ug/kg	570					
2-Methylnaphthalene	620	ug/kg	570					
Surrogate Recovery								
Nitrobenzene-d5	70.0	%						
2-Fluorobiphenyl	59.0	%						
4-Terphenyl-d14	62.0	%						

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0008913-06
LS-1-CD

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATES PREP	DATES ANALYSIS	ID
Extractable Petroleum Hydrocarbons				46	98-1	06-Oct	11-Oct	HL

Quality Control Information

Condition of sample received: Satisfactory
Sample temperature upon receipt: Received on Ice
Sample extraction method: Extracted Per the Method
Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? YES
Were significant modifications made to the method as specified in Sect 11.3? NO
Please note to subtract the method blank from the stated result.
The normal acceptance range for the extraction surrogates, Chloro-octadecane and o-Terphenyl, is 40-140%.
The normal acceptance range for the fractionation surrogates, 2-Fluorobiphenyl and 2-Bromonaphthalene, is 40-140%.

C9-C18 Aliphatics	ND	mg/kg	11.4
C19-C36 Aliphatics	13.3	mg/kg	11.4
C11-C22 Aromatics	ND	mg/kg	11.4

Surrogate Recovery

Chloro-Octadecane	55.0	%
o-Terphenyl	63.0	%
2-Fluorobiphenyl	90.0	%
2-Bromonaphthalene	86.0	%

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA-086 NH:200395-B/C CT:PH-0574 ME:MA086 RI:65

Laboratory Sample Number: L0008913-07
LS-2-AB
Sample Matrix: SOIL

Date Collected: 02-OCT-2000
Date Received : 04-OCT-2000
Date Reported : 16-OCT-00

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1-Amber

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATES PREP	DATES ANALYSIS	ID
Solids, Total	85.	%	0.10	30	2540G		10-Oct	MA
PNA's by GC/MS 8270				1	8270C	05-Oct	10-Oct	JA
Acenaphthene	ND	ug/kg	590					
2-Chloronaphthalene	ND	ug/kg	590					
Fluoranthene	ND	ug/kg	590					
Naphthalene	ND	ug/kg	590					
Benzo(a)anthracene	ND	ug/kg	590					
Benzo(a)pyrene	ND	ug/kg	590					
Benzo(b)fluoranthene	ND	ug/kg	590					
Benzo(k)fluoranthene	ND	ug/kg	590					
Chrysene	ND	ug/kg	590					
Acenaphthylene	ND	ug/kg	590					
Anthracene	ND	ug/kg	590					
Benzo(ghi)perylene	ND	ug/kg	590					
Fluorene	ND	ug/kg	590					
Phenanthrene	ND	ug/kg	590					
Dibenzo(a,h)anthracene	ND	ug/kg	590					
Indeno(1,2,3-cd)pyrene	ND	ug/kg	590					
Pyrene	ND	ug/kg	590					
Benzo(e)pyrene	ND	ug/kg	590					
Biphenyl	ND	ug/kg	590					
Perylene	ND	ug/kg	590					
1-Methylnaphthalene	ND	ug/kg	590					
2-Methylnaphthalene	ND	ug/kg	590					
Surrogate Recovery								
Nitrobenzene-d5	103.	%						
2-Fluorobiphenyl	89.0	%						
4-Terphenyl-d14	95.0	%						

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0008913-07
LS-2-AB

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATES PREP	DATES ANALYSIS	ID
Extractable Petroleum Hydrocarbons				46	98-1	06-Oct	11-Oct	HL

Quality Control Information

Condition of sample received: Satisfactory
Sample temperature upon receipt: Received on Ice
Sample extraction method: Extracted Per the Method
Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? YES
Were significant modifications made to the method as specified in Sect 11.3? NO
Please note to subtract the method blank from the stated result.
The normal acceptance range for the extraction surrogates, Chloro-octadecane and o-Terphenyl, is 40-140%.
The normal acceptance range for the fractionation surrogates, 2-Fluorobiphenyl and 2-Bromonaphthalene, is 40-140%.

C9-C18 Aliphatics	16.0	mg/kg	11.8
C19-C36 Aliphatics	31.0	mg/kg	11.8
C11-C22 Aromatics	ND	mg/kg	11.8

Surrogate Recovery

Chloro-Octadecane	57.0	%
o-Terphenyl	62.0	%
2-Fluorobiphenyl	113.	%
2-Bromonaphthalene	101.	%

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA:M-MA-086 NH:200395-B/C CT:PH-0574 ME:MA086 RI:65

Laboratory Sample Number: L0008913-08
LS-2-CD
Sample Matrix: SOIL

Date Collected: 02-OCT-2000
Date Received : 04-OCT-2000
Date Reported : 16-OCT-00

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1-Amber

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATES PREP	DATES ANALYSIS	ID
Solids, Total	67.	%	0.10	30	2540G		10-Oct	MA
PNA's by GC/MS 8270				1	8270C	05-Oct	10-Oct	JA
Acenaphthene	ND	ug/kg	1500					
2-Chloronaphthalene	ND	ug/kg	1500					
Fluoranthene	ND	ug/kg	1500					
Naphthalene	ND	ug/kg	1500					
Benzo(a)anthracene	ND	ug/kg	1500					
Benzo(a)pyrene	ND	ug/kg	1500					
Benzo(b)fluoranthene	ND	ug/kg	1500					
Benzo(k)fluoranthene	ND	ug/kg	1500					
Chrysene	ND	ug/kg	1500					
Acenaphthylene	ND	ug/kg	1500					
Anthracene	ND	ug/kg	1500					
Benzo(ghi)perylene	ND	ug/kg	1500					
Fluorene	ND	ug/kg	1500					
Phenanthrene	ND	ug/kg	1500					
Dibenzo(a,h)anthracene	ND	ug/kg	1500					
Indeno(1,2,3-cd)pyrene	ND	ug/kg	1500					
Pyrene	ND	ug/kg	1500					
Benzo(e)pyrene	ND	ug/kg	1500					
Biphenyl	1600	ug/kg	1500					
Perylene	ND	ug/kg	1500					
1-Methylnaphthalene	ND	ug/kg	1500					
2-Methylnaphthalene	ND	ug/kg	1500					
Surrogate Recovery								
Nitrobenzene-d5	105.	%						
2-Fluorobiphenyl	86.0	%						
4-Terphenyl-d14	88.0	%						

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L0008913-08
LS-2-CD

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATES PREP	DATES ANALYSIS	ID
Extractable Petroleum Hydrocarbons				46	98-1	06-Oct	11-Oct	HL

Quality Control Information

Condition of sample received: Satisfactory
Sample temperature upon receipt: Received on Ice
Sample extraction method: Extracted Per the Method
Were all QA/QC procedures REQUIRED by the method followed? YES
Were all performance/acceptance standards for the required procedures achieved? YES
Were significant modifications made to the method as specified in Sect 11.3? NO
Please note to subtract the method blank from the stated result.
The normal acceptance range for the extraction surrogates, Chloro-octadecane and o-Terphenyl, is 40-140%.
The normal acceptance range for the fractionation surrogates, 2-Fluorobiphenyl and 2-Bromonaphthalene, is 40-140%.

C9-C18 Aliphatics	106.	mg/kg	14.9
C19-C36 Aliphatics	644.	mg/kg	14.9
C11-C22 Aromatics	157.	mg/kg	14.9

Surrogate Recovery

Chloro-Octadecane	76.0	%
o-Terphenyl	77.0	%
2-Fluorobiphenyl	105.	%
2-Bromonaphthalene	97.0	%

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH DUPLICATE ANALYSIS

Laboratory Job Number: L0008913

Parameter	Value 1	Value 2	RPD	Units
Extractable Petroleum Hydrocarbons for sample(s) 05-08 (L0008861-01, WG66721)				
C9-C18 Aliphatics	ND	ND	NC	mg/kg
C19-C36 Aliphatics	ND	ND	NC	mg/kg
C11-C22 Aromatics	ND	ND	NC	mg/kg
Surrogate Recovery				
Chloro-Octadecane	76.0	84.0	10	%
o-Terphenyl	70.0	76.0	8	%
2-Fluorobiphenyl	75.0	80.0	6	%
2-Bromonaphthalene	60.0	78.0	26	%

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH SPIKE ANALYSES

Laboratory Job Number: L0008913

Parameter	% Recovery
PAH by GC/MS SIM 8270M LCS for sample(s) 02-04 (WG66833)	
Acenaphthene	87
Pyrene	93
Surrogate Recovery	
Nitrobenzene-d5	85
2-Fluorobiphenyl	79
4-Terphenyl-d14	85
PNA's by GC/MS 8270 LCS for sample(s) 05-08 (WG66637)	
Acenaphthene	87
1,2,4-Trichlorobenzene	83
1,4-Dichlorobenzene	68
2,4-Dinitrotoluene	87
n-Nitrosodi-n-propylamine	75
Pyrene	82
Surrogate Recovery	
Nitrobenzene-d5	81
2-Fluorobiphenyl	83
4-Terphenyl-d14	82
Extractable Petroleum Hydrocarbons LCS for sample(s) 05-08 (WG66721)	
Naphthalene	73
Acenaphthene	84
Anthracene	75
Pyrene	79
Chrysene	70
Nonane (C9)	66
Tetradecane (C14)	92
Nonadecane (C19)	92
Eicosane (C20)	93
Octacosane (C28)	90
Surrogate Recovery	
Chloro-Octadecane	86
o-Terphenyl	94
2-Fluorobiphenyl	87
2-Bromonaphthalene	67

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH MS/MSD ANALYSIS

Laboratory Job Number: L0008913

Parameter	MS %	MSD %	RPD
PAH by GC/MS SIM 8270M for sample(s) 02-04 (L0008913-02, WG66833)			
Acenaphthene	89	85	5
Pyrene	88	88	0
PNA's by GC/MS 8270 for sample(s) 05-08 (L0008914-01, WG66637)			
Acenaphthene	85	85	0
1,2,4-Trichlorobenzene	84	83	1
1,4-Dichlorobenzene	80	79	1
2,4-Dinitrotoluene	100	94	6
n-Nitrosodi-n-propylamine	85	85	0
Pyrene	85	85	0

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0008913

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATES PREP	DATES ANALYSIS	ID
Blank Analysis for sample(s) 02-04								
PAH by GC/MS SIM 8270M				1	8270C-M	06-Oct	11-Oct	MK
Acenaphthene	ND	ug/l	0.20					
2-Chloronaphthalene	ND	ug/l	0.20					
Fluoranthene	ND	ug/l	0.20					
Naphthalene	ND	ug/l	0.20					
Benzo(a)anthracene	ND	ug/l	0.20					
Benzo(a)pyrene	ND	ug/l	0.20					
Benzo(b)fluoranthene	ND	ug/l	0.20					
Benzo(k)fluoranthene	ND	ug/l	0.20					
Chrysene	ND	ug/l	0.20					
Acenaphthylene	ND	ug/l	0.20					
Anthracene	ND	ug/l	0.20					
Benzo(ghi)perylene	ND	ug/l	0.20					
Fluorene	ND	ug/l	0.20					
Phenanthrene	ND	ug/l	0.20					
Dibenzo(a,h)anthracene	ND	ug/l	0.20					
Indeno(1,2,3-cd)Pyrene	ND	ug/l	0.20					
Pyrene	ND	ug/l	0.20					
1-Methylnaphthalene	ND	ug/l	0.20					
2-Methylnaphthalene	ND	ug/l	0.20					
Perylene	ND	ug/l	0.20					
Benzo(e)Pyrene	ND	ug/l	0.20					
Surrogate Recovery								
Nitrobenzene-d5	86.0	%						
2-Fluorobiphenyl	85.0	%						
4-Terphenyl-d14	77.0	%						
Blank Analysis for sample(s) 01								
PAH by GC/MS SIM 8270M				1	8270C-M	06-Oct	13-Oct	MK
Acenaphthene	ND	ug/l	0.20					
2-Chloronaphthalene	ND	ug/l	0.20					
Fluoranthene	ND	ug/l	0.20					
Naphthalene	ND	ug/l	0.20					
Benzo(a)anthracene	ND	ug/l	0.20					
Benzo(a)pyrene	ND	ug/l	0.20					
Benzo(b)fluoranthene	ND	ug/l	0.20					
Benzo(k)fluoranthene	ND	ug/l	0.20					
Chrysene	ND	ug/l	0.20					
Acenaphthylene	ND	ug/l	0.20					
Anthracene	ND	ug/l	0.20					
Benzo(ghi)perylene	ND	ug/l	0.20					
Fluorene	ND	ug/l	0.20					
Phenanthrene	ND	ug/l	0.20					
Dibenzo(a,h)anthracene	ND	ug/l	0.20					
Indeno(1,2,3-cd)Pyrene	ND	ug/l	0.20					
Pyrene	ND	ug/l	0.20					

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0008913

Continued

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATES PREP	DATES ANALYSIS	ID
Blank Analysis for sample(s) 01								
PAH by GC/MS SIM 8270M continued				1	8270C-M	06-Oct	13-Oct	MK
1-Methylnaphthalene	ND	ug/l	0.20					
2-Methylnaphthalene	ND	ug/l	0.20					
Perylene	ND	ug/l	0.20					
Benzo(e)Pyrene	ND	ug/l	0.20					
Surrogate Recovery								
Nitrobenzene-d5	81.0	%						
2-Fluorobiphenyl	75.0	%						
4-Terphenyl-d14	48.0	%						
Blank Analysis for sample(s) 05-08								
PNA's by GC/MS 8270				1	8270C	05-Oct	10-Oct	JA
Acenaphthene	ND	ug/kg	500					
2-Chloronaphthalene	ND	ug/kg	500					
Fluoranthene	ND	ug/kg	500					
Naphthalene	ND	ug/kg	500					
Benzo(a)anthracene	ND	ug/kg	500					
Benzo(a)pyrene	ND	ug/kg	500					
Benzo(b)fluoranthene	ND	ug/kg	500					
Benzo(k)fluoranthene	ND	ug/kg	500					
Chrysene	ND	ug/kg	500					
Acenaphthylene	ND	ug/kg	500					
Anthracene	ND	ug/kg	500					
Benzo(ghi)perylene	ND	ug/kg	500					
Fluorene	ND	ug/kg	500					
Phenanthrene	ND	ug/kg	500					
Dibenzo(a,h)anthracene	ND	ug/kg	500					
Indeno(1,2,3-cd)pyrene	ND	ug/kg	500					
Pyrene	ND	ug/kg	500					
Benzo(e)pyrene	ND	ug/kg	500					
Biphenyl	ND	ug/kg	500					
Perylene	ND	ug/kg	500					
1-Methylnaphthalene	ND	ug/kg	500					
2-Methylnaphthalene	ND	ug/kg	500					
Surrogate Recovery								
Nitrobenzene-d5	101.	%						
2-Fluorobiphenyl	82.0	%						
4-Terphenyl-d14	84.0	%						
Blank Analysis for sample(s) 05-08								
Extractable Petroleum Hydrocarbons				46	98-1	06-Oct	10-Oct	HL
C9-C18 Aliphatics	ND	mg/kg	10.0					
C19-C36 Aliphatics	ND	mg/kg	10.0					
C11-C22 Aromatics	ND	mg/kg	10.0					

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE BATCH BLANK ANALYSIS

Laboratory Job Number: L0008913

Continued

PARAMETER	RESULT	UNITS	RDL	REF	METHOD	DATES PREP	DATES ANALYSIS	ID
Blank Analysis for sample(s) 05-08								
Extractable Petroleum Hydrocarbons continued				46	98-1	06-Oct	10-Oct	HL
C11-C22 Aromatics, Adjusted	ND	mg/kg	10.0					
Naphthalene	ND	mg/kg	0.500					
2-Methylnaphthalene	ND	mg/kg	0.500					
Acenaphthalene	ND	mg/kg	0.500					
Acenaphthene	ND	mg/kg	0.500					
Fluorene	ND	mg/kg	0.500					
Phenanthrene	ND	mg/kg	0.500					
Anthracene	ND	mg/kg	0.500					
Fluoranthene	ND	mg/kg	0.500					
Pyrene	ND	mg/kg	0.500					
Benzo(a)anthracene	ND	mg/kg	0.500					
Chrysene	ND	mg/kg	0.500					
Benzo(b)fluoranthene	ND	mg/kg	0.500					
Benzo(k)fluoranthene	ND	mg/kg	0.500					
Benzo(a)pyrene	ND	mg/kg	0.500					
Indeno(1,2,3-cd)Pyrene	ND	mg/kg	0.500					
Dibenzo(a,h)anthracene	ND	mg/kg	0.500					
Benzo(ghi)perylene	ND	mg/kg	0.500					
Surrogate Recovery								
Chloro-Octadecane	90.0	%						
o-Terphenyl	77.0	%						
2-Fluorobiphenyl	79.0	%						
2-Bromonaphthalene	71.0	%						

REFERENCES

1. Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Update III, 1997.

30. Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

46. Method for the Determination of Extractable Petroleum Hydrocarbons (EPH), Massachusetts Department of Environmental Protection, (MADEP-EPH-98-1), January 1998.

GLOSSARY OF TERMS AND SYMBOLS

REF Reference number in which test method may be found.

METHOD Method number by which analysis was performed.

ID Initials of the analyst.

LIMITATION OF LIABILITIES

Alpha Analytical, Inc. performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical, Inc., shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical, Inc. be held liable for any incidental consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical, Inc.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding times and splitting of samples in the field.

attachment 1

Quality Control Acceptance Criteria

Volatile Organics by Method 8260B

surrogate spike % recovery	AQ Limits		Soil Limits	
	LCL	UCL	LCL	UCL
1,2-Dichloroethane-d_4	75%	125%	75%	125%
4-Bromofluorobenzene	75%	125%	75%	125%
Toluene-d_8	75%	125%	75%	125%
Dibromofluoromethane	75%	125%	75%	125%

matrix spike / matrix spike duplicate (MS/MSD) & lab control sample (LCS)	percent recovery				duplicate and/or MSD	
	AQ Limits		Soil Limits		AQ Limits	Soil Limits
	LCL	UCL	LCL	UCL	RPD	RPD
1,1-Dichloroethene	61%	145%	59%	172%	all target compounds	
Trichloroethene	71%	120%	62%	137%	20%	30%
Chlorobenzene	75%	130%	60%	133%		
Benzene	76%	127%	66%	142%		
Toluene	76%	125%	59%	139%		

Volatile Organics by Method 8021B

surrogate spike % recovery	AQ Limits		Soil Limits	
	LCL	UCL	LCL	UCL
4-Bromochlorobenzene	70%	110%	70%	120%
4-Bromofluorobenzene	70%	110%	70%	120%

matrix spike / matrix spike duplicate (MS/MSD) & lab control sample (LCS)	percent recovery				duplicate and/or MSD	
	AQ Limits		Soil Limits		AQ Limits	Soil Limits
	LCL	UCL	LCL	UCL	RPD	RPD
1,1-Dichloroethene	70%	130%	70%	130%	all target compounds	
Trichloroethene	70%	130%	70%	130%	20%	30%
Chlorobenzene	70%	130%	70%	130%		
Benzene	70%	130%	70%	130%		
Toluene	70%	130%	70%	130%		
Ethylbenzene	70%	130%	70%	130%		

Semi-Volatile Organics by Method 8270C (includes PAHs)

surrogate spike % recovery	AQ Limits		Soil Limits	
	LCL	UCL	LCL	UCL
Nitrobenzene-d_5	23%	120%	23%	120%
Phenol-d_6	10%	120%	10%	120%
2-Fluorophenol	21%	120%	25%	120%
2-Fluorobiphenyl	43%	120%	30%	120%
p-Terphenyl-d_{14}	33%	120%	18%	120%
2,4,6-Tribromophenol	10%	120%	19%	120%

matrix spike / matrix spike duplicate (MS/MSD) & lab control sample (LCS)	percent recovery				duplicate and/or MSD	
	AQ Limits		Soil Limits		AQ Limits	Soil Limits
	LCL	UCL	LCL	UCL	RPD	RPD
1,2,4-Trichlorobenzene	39%	98%	38%	107%	all target compounds	
Acenaphthene	46%	118%	31%	137%	40%	50%
2,4-Dinitrotoluene	24%	96%	28%	89%		
Pyrene	26%	127%	35%	142%		
N-Nitroso-di-n-propylamine	41%	116%	41%	126%		
1,4-Dichlorobenzene	36%	97%	28%	104%		
Pentachlorophenol	9%	103%	17%	109%		
Phenol	12%	110%	26%	90%		
2-Chlorophenol	27%	123%	25%	102%		
4-Chloro-3-methylphenol	23%	97%	26%	103%		
4-Nitrophenol	10%	80%	11%	114%		

attachment 1

Quality Control Acceptance Criteria

PCB/Pesticides by Method 8082/8081

surrogate spike % recovery	AQ Limits		Soil Limits	
	LCL	UCL	LCL	UCL
2,4,5,6-Tetrachloro-m-xylene	40%	120%	40%	120%
Decachlorobiphenyl	40%	120%	40%	120%

matrix spike / matrix spike duplicate (MS/MSD) & lab control sample (LCS)	percent recovery				duplicate and/or MSD	
	AQ Limits		Soil Limits		AQ Limits	Soil Limits
	LCL	UCL	LCL	UCL	RPD	RPD
Lindane	56%	123%	46%	127%	all target compounds	
Heptachlor	40%	131%	35%	130%	30%	50%
Aldrin	40%	120%	34%	132%		
Dieldrin	52%	126%	31%	134%		
Endrin	56%	121%	42%	139%		
4,4'-DDT	38%	127%	23%	134%		
Aroclor 1242/1016	40%	140%	40%	140%		
Aroclor 1260	40%	140%	40%	140%		

Volatile Petroleum Hydrocarbons (VPH) by MA DEP 98-1

surrogate spike % recovery	AQ Limits		Soil Limits	
	LCL	UCL	LCL	UCL
2,5-Dibromotoluene	70%	130%	70%	130%

laboratory control sample (LCS)	percent recovery				duplicate	
	AQ Limits		Soil Limits		AQ Limits	Soil Limits
	LCL	UCL	LCL	UCL	RPD	RPD
all compounds	70%	130%	70%	130%	50%	50%

Extractable Petroleum Hydrocarbons (EPH) by MA DEP 98-1

surrogate spike % recovery	AQ Limits		Soil Limits	
	LCL	UCL	LCL	UCL
Chloro-octadecane	40%	140%	40%	140%
ortho-Terphenyl	40%	140%	40%	140%
2-Fluorobiphenyl (fractionation)	40%	140%	40%	140%
2-Bromonaphthalene (fractionation)	40%	140%	40%	140%

laboratory control sample (LCS)	percent recovery				duplicate	
	AQ Limits		Soil Limits		AQ Limits	Soil Limits
	LCL	UCL	LCL	UCL	RPD	RPD
all compounds	40%	140%	40%	140%	50%	50%

TPH (GC-FID) by Method 8100M

surrogate spike % recovery	AQ Limits		Soil Limits		duplicate	
	LCL	UCL	LCL	UCL	AQ Limits RPD	Soil Limits RPD
ortho-Terphenyl	40%	140%	40%	140%	40%	40%

TPH by Method 418.1

matrix spike (MS) & laboratory control sample (LCS)	percent recovery				duplicate	
	AQ Limits		Soil Limits		AQ Limits	Soil Limits
	LCL	UCL	LCL	UCL	RPD	RPD
TPH	60%	140%	60%	140%	40%	40%

Quality Control Acceptance Criteria

Trace Metals by Method 6010B/7000 series

matrix spike (MS) & laboratory control sample (LCS)	percent recovery				duplicate	
	AQ Limits		Soil Limits		AQ Limits	Soil Limits
	LCL	UCL	LCL	UCL	RPD	RPD
target analyte	75%	125%	70%	140%	20%	35%

Mercury by Method 7470A/7471A

matrix spike (MS) & laboratory control sample (LCS)	percent recovery				duplicate	
	AQ Limits		Soil Limits		AQ Limits	Soil Limits
	LCL	UCL	LCL	UCL	RPD	RPD
mercury	70%	130%	60%	140%	35%	45%

Total Cyanide by Method 9010B

matrix spike (MS) & laboratory control sample (LCS)	percent recovery				duplicate	
	AQ Limits		Soil Limits		AQ Limits	Soil Limits
	LCL	UCL	LCL	UCL	RPD	RPD
cyanide	80%	120%	65%	135%	30%	40%

Total Phenol by Method 9065

matrix spike (MS) & laboratory control sample (LCS)	percent recovery				duplicate	
	AQ Limits		Soil Limits		AQ Limits	Soil Limits
	LCL	UCL	LCL	UCL	RPD	RPD
phenol	70%	130%	65%	135%	20%	30%

ALPHA Analytical Laboratories, Inc.

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CHAIN OF CUSTODY

№ 4987 Sheet 1 of 1

ALPHA Job #: L0008913

Date Rec'd in Lab: 10/4

Date Due: 10/12

Client Name: CAMP DRESSER & MCKEE

Client Address: ONE CAMBRIDGE PLACE CAMBRIDGE MA 02139

Phone #: 6174526267 FAX #: 6174528000

Project Name: BUCKLEY & MANN

Project Location: NORFOLK, MA

Project #: 112-2544-GS.LAGW

Project Manager: BOB DANGEL

Report To: BOB DANGEL

Bill To: SAME @ CDM, ONE CAMBRIDGE PLACE CAMBRIDGE MA 02139

PO#:

- [x] Standard TAT
- [ ] RUSH TAT _____ (# DAYS)
- [ ] FAX Results
- [ ] State Forms
- [ ] Smart Report

Comments (Please note specific method, detection limit or reporting requirements.)

* FOR GW SAMPLES, DECANT AND EXTRACT SUPERNATE ONLY (NOT SETTLED SOILS)

ANALYSIS REQUEST

ALPHA Lab #	Sample ID	Matrix/Source *	Sampling Date	Sampling Time	Sampler's Initials	Solubles: Field Filtered? (Y/N)	8270C-SIM ; PAH-LOW	EPH; STANDARD MA DEP	8270C FOR PAH
8913-1	GW-1-AB *	GW	10/2/06		BCH		✓		
-2	GW-1-CD *	GW			BCH		✓		
-3	GW-2-AB *	GW			BCH		✓		
-4	GW-2-CD *	GW			BCH		✓		
-5	LS-1-AB	S			BCH			✓	✓
-6	LS-1-CD	S			BCH			✓	✓
-7	LS-2-AB	S			BCH			✓	✓
-8	LS-2-CD	S	↓		BCH			✓	✓

# of Containers:	2	1	1
Container Type: *	A	A	A
Preservative: *	A	A	A

	Date	Time
Transfers Accepted By:	10/3/06	1535
	10/4	1835
Transfers Relinquished By:		

All samples submitted are subject to Alpha's standard Terms and Conditions.

* See Reverse side for Matrix, Container, and Preservative Codes.

Form No.: 01-01