PHASE II ENVIRONMENTAL ASSESSMENT REPORT

Burlington International Airport House Removals AIP 87

10 North Henry Court
13, 57 and 72 Dumont Avenue
5 Delaware Street
23 Maryland Street
6 Elizabeth Street
2 & 6 Patrick Street
392 White Street

South Burlington, Vermont 05403

May 2, 2012

KAS #509110229

Prepared for
Stantec Consulting, Inc.
55 Green Mountain Drive
South Burlington, Vermont 05403

Prepared by

368 Avenue D Suite 15 • P.O. Box 787 • Williston, VT 05495
802-383-0486 • Fax 802-383-0490
www.kas-consulting.com

1.0 INTRODUCTION

KAS, Inc. (KAS), conducted Phase II Environmental Site Assessment (ESA) activities at various locations within Airport Improvement Project 87 (AIP 87) owned by the Burlington International Airport in South Burlington, Vermont. This work took place from November 2011 through April 2012.

KAS performed the work for Stantec Consulting, Inc. (Stantec) according to written notice to proceed provided by Stantec on November 10, 2011 and under the terms of the sub-consultant agreement by and between KAS and Stantec dated December 6, 2011. KAS performed overall management and select aspects of the work and retained three subcontractors in connection with this work, as outlined in Section 2.1.

The Phase II ESA work locations within AIP 87 included:

- 10 North Henry Court
- 13, 57 and 72 Dumont Avenue
- 5 Delaware Street
- 23 Maryland Street
- 6 Elizabeth Street
- 2 & 6 Patrick Street
- 392 White Street

The locations of these properties are shown on the property locations map in Appendix A. This report presents a summary of the work that was approved and performed. The conclusions of the work are that four above-ground fuel oil storage tanks (ASTs) were successfully decommissioned, a pipe sticking out of the ground at 392 White Street was investigated and was found not to be indicative of a buried fuel tank, and that none of the building materials samples collected and tested were indicative of hazardous demolition wastes.

KAS' sub-consultant agreement with Stantec also provides for KAS' performance of asbestos inspections at all structures within AIP 87 and preparation of asbestos abatement specifications. This work has been completed and has been reported on separately for contractor bidding purposes.

2.0 SCOPE OF WORK

The following work scope was completed.

- Preparation of submittals, notifications, approvals, project coordination, and health and safety plan preparation;
- Decommissioning of four ASTs, which included cutting, cleaning and waste containerization, transport and disposal of tank derived wastes by a licensed contractor;
- Characterization (sampling and testing) of building materials for waste disposal purposes via toxicity characteristic leaching procedure (TCLP) and lead testing;
- Investigation of a pipe sticking out of the ground at 392 White Street; and,
- Preparation of a Phase II ESA report (this report).

2.1 Notifications, Approvals, Project Coordination, HASP

Notifications/Approvals

Several notifications and approvals were necessary to implement the work as planned. These were as follows. No permits were required.

- Notification and access agreement of Burlington International Airport staff for coordination purposes, KAS notified Kurt Miller of pending work so that access could be gained to the individual residences.
- Coordination with the Vermont Department of Environmental Conservation (DEC) was performed by EP&S to obtain EPA Identification Numbers for each of the waste generation locations.

Project Coordination

KAS was contracted by Stantec to implement all work associated with this Phase II ESA. KAS performed all work except for the contracted tasks noted below. Alan Liptak, CPG of KAS and an Environmental Professional pursuant to EPA / ASTM definition, was the project manager and planned all tasks, prepared necessary documents, conducted and oversaw the field work and wrote the reports.

KAS contracted with Environmental Products and Services of Vermont, Inc. of Williston, Vermont (EP&S) to cut and clean the ASTs and to manage the tank derived wastes. KAS contracted with Endyne, Inc. Laboratory Services of Williston, Vermont (Endyne) to perform laboratory characterization testing

of building materials samples.

Health and Safety Plan (HASP)

A site-specific HASP was prepared and implemented to govern the safety aspects of the job in accordance with the Vermont Occupational Safety and Health Administration (VOSHA) requirements. All KAS personnel, and all personnel involved in the project working for KAS, were briefed on the health and safety requirements. No adverse health and safety incidents occurred during conduct of the work.

2.2 Above Ground Storage Tank Decommissioning and Cleaning

KAS coordinated, observed and documented the decommissioning of four ASTs formerly used for storage of #2 fuel oil for home heating purposes. addresses. EP&S performed the decommissioning work which included cutting and cleaning the ASTs, manually draining the oil supply and return lines to the furnace (when possible and not inaccessible beneath basement floors or walls), removing the fill and vent piping, and placing the cleaning wastes (including sludge, oil, water, and personnel protective equipment) into containers for shipping to a licensed disposal facility. EP&S also performed documentation including obtaining the appropriate EPA waste generator identification numbers for each location, completing and mailing the waste manifest paperwork, and compiling the documentation and providing it to KAS.

The cleaned ASTs and associated piping were left on site as clean scrap metal for ultimate disposal by the building demolition contractor. Table 1 presents a summary of the locations where ASTs were decommissioned, the date of decommissioning, and the amount and disposition of wastes generated at each location. Photos of the cleaned ASTs are included in Appendix B.

Table 1: Summary of AST Decommissioning, AIP 87

Location	Date	Amount and Disposition of Wastes
72 Dumont Avenue	12/21/11	60 gallons shipped via manifest on 12/30/11
5 Delaware Street	12/21/11	15 gallons shipped via manifest on 12/30/11
23 Maryland Street	12/21/11	15 gallons shipped via manifest on 12/30/11
6 Elizabeth Street	12/21/11	15 gallons shipped via manifest on 12/30/11

AST-derived wastes were containerized, transported and disposed of by EP&S. Waste manifest copies are included in Appendix C.

2.3 Building Materials Waste Characterization

KAS collected samples of building materials from ten locations within AIP 74. The determination of whether to collect a building materials sample from a specific location was based on the estimated age of the building. Lead paint was effectively banned from United States distribution in 1978 and houses in existence before then are likely to contain lead painted surfaces. Within AIP 87, all ten houses were constructed pre-1978. Characterization sampling was performed to determine that the resulting building debris was not sufficiently enriched in lead so as to render the building waste stream as hazardous by reason of toxicity characteristic – lead.

Representative samples of building materials were collected by KAS' inspectors concurrent with the asbestos inspection. A reasonable attempt was made to create a building material sample at each location which reflected the composition of the building at large. Destructive sampling techniques were employed and no attempt was made to repair the damage in light of the building's pending demolition. The sampled materials were varied and included wood, sheetrock, roofing, flooring and floor coverings, exterior siding, concrete, insulating materials, and others, but not friable asbestos containing materials, petroleum or hazardous substances. The samples were containerized and labeled in the field pursuant to KAS' protocols, then delivered to Endyne under chain of custody procedure for TCLP Lead analysis.

The results of the testing indicate that none of the waste characterization samples contained sufficient extractable lead to render the combined waste stream hazardous by reason of toxicity. The state and federal threshold for TCLP lead is 5 milligrams per liter (mg/l) for designation as hazardous waste and none of the test results equaled or exceeded this threshold. Detectable lead was reported in some of the samples and the reported test results are summarized in Table 2. Copies of the laboratory reports are contained within Appendix D.

Table 2: Summary of TCLP Lead Testing Results, AIP 87		
Location	TCLP Concentration (mg/l)	State/federal threshold for designation (5 mg/l) exceeded?
10 North Henry Court	1.2	No
5 Delaware Street	ND <0.20	No
13 Dumont Avenue	ND <0.20	No
57 Dumont Avenue	ND <0.20	No
72 Dumont Avenue	ND <0.20	No
23 Maryland Street	ND <0.20	No
6 Elizabeth Street	ND <0.20	No
2 Patrick Street	ND <0.20	No
6 Patrick Street	1.3	No
392 White Street	ND <0.20	No

2.4 Household Hazardous Waste Removal

KAS contracted with EP&S to identify and remove household hazardous waste materials at the residential structures within AIP 87. A preliminary inventory of HHW had been made in KAS' Phase I ESA report.[1] However, several months had passed since the Phase I ESA inspections were done and some of the homes had still been occupied at that time. Thus a follow up inspection was performed by EP&S to make sure that HHW contained in the vacated houses was identified and taken care of properly.

For purposes of this Phase II ESA, the intent was to remove all materials that could become problematic for disposal during demolition efforts therefore HHW included all vessels that contained known or suspected petroleum or hazardous substances, including fuels, aerosols, oils, grease, lubricants, oil based paints, solvents, thinners, stains, pesticides/herbicides and similar materials. This also included loose fluorescent light bulbs not attached to fixtures. Excluded from the Phase II work scope was removal of any object or substance physically connected to a residence (such as smoke detectors, paint, caulk, mercury thermostats and furnace switches, and fluorescent light bulbs in fixtures), as well as non-hazardous substances such as latex paint, and common household materials such as detergents, bleach, window cleaner, ammonia, and similar materials.

During this Phase II ESA no household hazardous wastes as defined above

[1] KAS, Inc., Phase I Environmental Site Assessment Report, Burlington International Airport AIP 87, October 28, 2011.

were identified in or removed from homes within AIP 87.

2.5 Additional Phase II Environmental Assessment Activities

A steel pipe in the floor of the greenhouse shed at 392 White Street was encountered. Assessment of the pipe indicated that the pipe appears to be connected to a buried water tank. Miscellaneous steel fittings and a pressure gauge inside the greenhouse suggest that there had been an irrigation system inside and the water tank was most likely part of this system. The pipe was gauged and found to be 106" deep and containing approximately 24" of rusty water. There was no odor or other indication of petroleum or other substances, and a vapor reading using a photoionization device was at background levels of 0.2 parts per million, indicating no petroleum or other volatile chemicals present. During the building removals, the contractors should be notified of the presence of a buried water tank at this location which should be removed and scrapped as part of the house removal. No special approvals or notifications are required to do this. Field documentation and photos are included in Appendix E.

3.0 CONCLUSIONS AND RECOMMENDATIONS

KAS has made the following conclusions in connection with the Phase II ESA work described herein.

- Four former fuel oil ASTs were successfully decommissioned at 72 Dumont Avenue, 5 Delaware Street, 23 Maryland Street and 6 Elizabeth Street. Waste materials were properly managed and removed from the properties. The cleaned ASTs were left on site for the demolition contractor. No further Phase II action is required.
- All ten houses were sampled and tested for concentrations of lead to determine whether the demolition debris could be hazardous. None of the test results were indicative of hazardous waste due to lead concentrations. The building demolition debris can be disposed of as non-hazardous waste (subject to prior asbestos abatement and compliance with VOSHA regulations).
- No household hazardous wastes were identified or removed from houses within AIP 87.
- A pipe in the floor of the greenhouse shed at 392 White Street was assessed and was found to be a water tank most likely associated with a past greenhouse watering system. No indications of petroleum or hazardous substances were encountered. The tank can be removed by the demolition contractor with no special precautions or notifications.

Appendix A

Properties Location Map

BURLINGTON INTERNATIONAL AIRPORT
HOUSE REMOVALS ON AIRPORT ACQUIRED LAND
LOCATION PLAN

N

MAGNETIC

AIRPORT PARKWAY

SHAMROCK RD

VERMONT ARMY NATIONAL GUARD AVIATION FACILITY

TAXIWAY FOXTROT

VERMONT AIR NATIONAL GUARD

RUNWAY 15-33

TAXIWAY GOLF

TAXIWAY HOTEL

TAXIWAY GOLF

SERVICE ROAD

AIRPORT PARKWAY

KIRBY ROAD

KIRBY ROAD

PICARD CIR

NO. HENRY CT

DUMONT AVE

SO. HENRY CT

AIRPORT PARKWAY

DUVAL STREET

HANOVER ST

DUMONT AVE

PUMPLANE

WHITE STREET

DELAWARE STREET

AIRPORT DRIVE

MARYLAND STREET

LEDOUX TERRACE

FAA CONTROL TOWER

BTV TERMINAL

PARKING GARAGE

TAXIWAY ALPHA

AIRPORT DRIVE

ELIZABETH STREET

PATRICK STREET

LOCKWOOD STREET

AIRPORT DRIVE

STREET ADDRESS LEGEND:

APD = AIRPORT DRIVE
APP = AIRPORT PARKWAY
DA = DUMONT AVENUE
DS = DELAWARE STREET
ES = ELIZABETH STREET
LT = LEDOUX TERRACE
MS = MARYLAND STREET
NHC = NORTH HENRY COURT
PS = PATRICK STREET
PC = PICARD CIRCLE
SR = SHAMROCK ROAD
WS = WHITE STREET

COLOR LEGEND:

AIP 74= BLUE
AIP 78= GREEN
AIP 81= CYAN
AIP 84= MAGENTA
AIP 87= RED
AIP MISC. GROUP = BLACK

Stantec Consulting Services Inc.
55 Green Mountain Drive
South Burlington, VT U.S.A.
05407-2246
Tel. 802.864.0223
Fax. 802.864.0165
www.stantec.com

0 200 400
SCALE

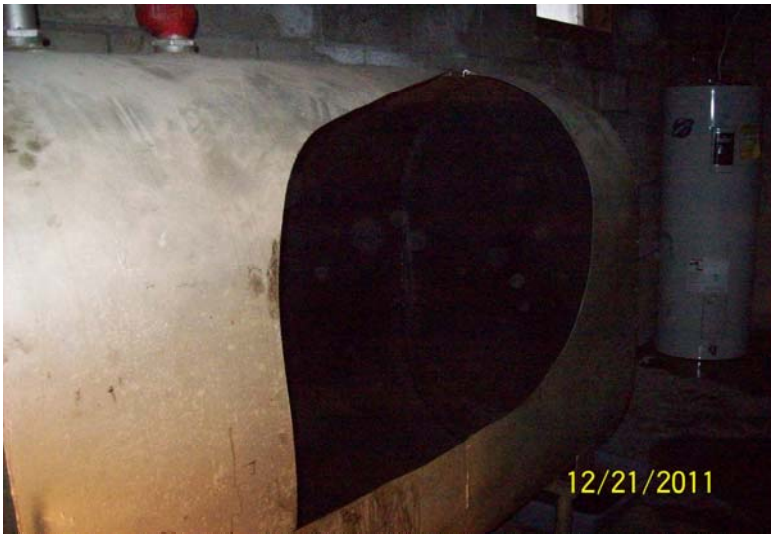
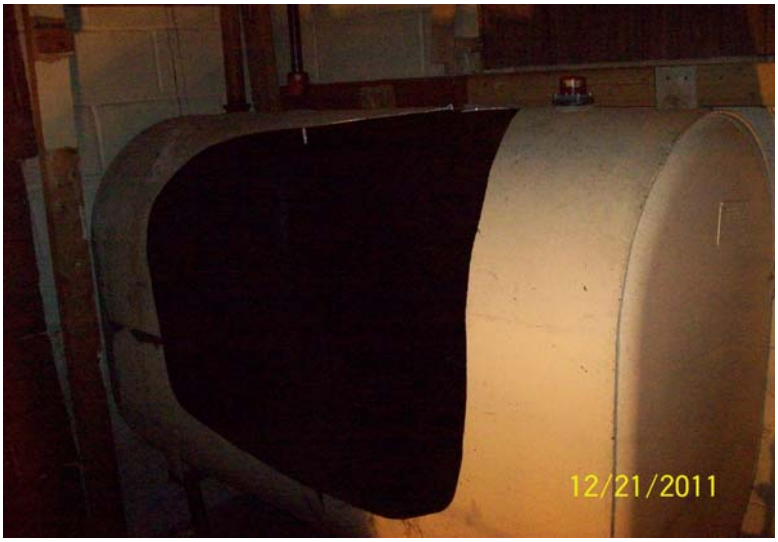
STANTEC PROJ. #195310592

08 /25 /2011

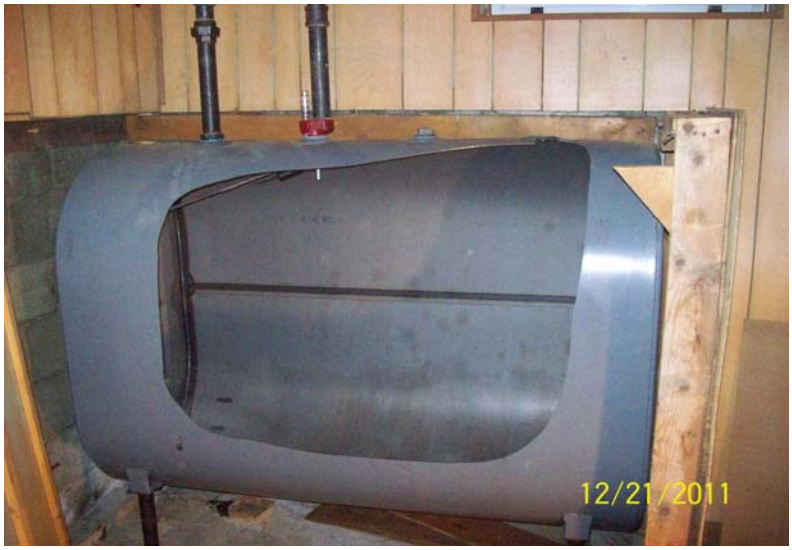
Appendix B

Photographs

Photographic Documentation
AST Closures
Burlington International Airport
South Burlington, VT

Photograph ID: 015 21-Dec-11 Location: 72 Dumont Avenue AIP 87 KAS Job Number 509110229	
Photograph ID: 016 21-Dec-11 Location: 5 Delaware Street AIP 87 KAS Job Number 509110229	

Photographic Documentation
AST Closures
Burlington International Airport
South Burlington, VT

Photograph ID: 017 21-Dec-11 Location: 23 Maryland Street AIP 87 KAS Job Number 509110229	
Photograph ID: 018 21-Dec-11 Location: 6 Elizabeth AIP 87 KAS Job Number 509110229	

Appendix C

Waste Manifest Copies

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
VTP000014057	1	800-843-8265	004156205 FLE

GENERATOR

5. Generator's Name and Mailing Address
BURLINGTON INTERNATIONAL AIRPORT
1200 AIRPORT DRIVE, #1
SO BURLINGTON VT 05403
Generator's Phone: 802 863-2874

Generator's Site Address (if different than mailing address)
BURLINGTON INTERNATIONAL AIRPORT
68 & 72 DUMONT AVE
BURLINGTON VT 05403

6. Transporter 1 Company Name
ENVIRONMENTAL PROD & SVCS OF VT, INC
U.S. EPA ID Number: NYR000115733

7. Transporter 2 Company Name
U.S. EPA ID Number:

8. Designated Facility Name and Site Address
ENVIRONMENTAL PROD & SVCS OF VT, INC
300 SMITH BLVD.
ALBANY NY 12202
Facility's Phone: 518 465-4000
U.S. EPA ID Number: NYD983971877

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. RQ NA1993, Waste Fuel oil (NO. 2) Mixture, 3, PGIII	2	DM	60	G	D001
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1) APP #: A1211099-PFT, 2 X 30 GAL, ERG#128 The material is not considered a RCRA or State Hazardous waste in NYS
2) and is being shipped as an off-specification fuel product to be recycle/reclaimed as a fuel product.
3)
4) JOB#s: V2378, V2380

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable International and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: [illegible] Signature: [signature] Month: 12 Day: 30 Year: 16

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: James Robidea Signature: [signature] Month: 12 Day: 30 Year: 16
Transporter 2 Printed/Typed Name: Signature: Month: Day: Year:

DESIGNATED FACILITY

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
18b. Alternate Facility (or Generator) U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator) Month: Day: Year:

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Signature: Month: Day: Year:

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
VTP000014066	1	800-843-8265	004156225 FLE

GENERATOR

5. Generator's Name and Mailing Address
BURLINGTON INTERNATIONAL AIRPORT
1200 AIRPORT DRIVE, #1
SO BURLINGTON VT 05403
Generator's Phone: 802 863-2874

Generator's Site Address (if different than mailing address)
BURLINGTON INTERNATIONAL AIRPORT
23 MARYLAND STREET
SO BURLINGTON VT 05403

6. Transporter 1 Company Name
ENVIRONMENTAL PROD & SVCS OF VT, INC
U.S. EPA ID Number
NYR000115733

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
ENVIRONMENTAL PROD & SVCS OF VT, INC
300 SMITH BLVD.
ALBANY NY 12202
Facility's Phone: 518 465-4000
U.S. EPA ID Number
NYD986971877

9a. HM	9b. U.S. DOT Description (Including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. RQ NA1993, Waste Fuel oil (NO. 2) Mixture, 3, PGIII	1	DF	15	G	D001
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1) APP #: A1211093-PFT, 1 X 15 GAL, ERG#128 The material is not considered a RCRA or State Hazardous waste in NYS
2) and is being shipped as an off-specification fuel product to be recycle/reclaimed as a fuel product.
3)
4) JOB#: V2380

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: KURT MILLER
Signature:
Month 12 Day 30 Year 11

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: JAMES ROBIDEAU
Signature:
Month 12 Day 30 Year 11

Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name
Signature
Month Day Year

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
VTP000014067	1	800-843-8265	004156224 FLE

GENERATOR

5. Generator's Name and Mailing Address
BURLINGTON INTERNATIONAL AIRPORT
1200 AIRPORT DRIVE, #1
SO BURLINGTON VT 05403
Generator's Phone: 802 863-2874

Generator's Site Address (if different than mailing address)
BURLINGTON INTERNATIONAL AIRPORT
6 ELIZABETH STREET
SO. BURLINGTON VT 05403

6. Transporter 1 Company Name
ENVIRONMENTAL PROD & SVCS OF VT, INC
U.S. EPA ID Number: NYR000115733

7. Transporter 2 Company Name
U.S. EPA ID Number:

8. Designated Facility Name and Site Address
ENVIRONMENTAL PROD & SVCS OF VT, INC
300 SMITH BLVD.
ALBANY NY 12202
Facility's Phone: 518 465-4000
U.S. EPA ID Number: NYD986971877

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. RQ NA1993, Waste Fuel oil (NO. 2) Mixture, 3, PGIII	1	DF	15	G	D001
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1) APP #: A1211096-PFT, 1 X 15 GAL, ERG#128 The material is not considered a RCRA or State Hazardous waste in NYS
2) and is being shipped as an off-specification fuel product to be recycle/reclaimed as a fuel product.
3)
4) JOB#: V2380

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Kurt Miller — Signature — Month 12 Day 30 Year 11

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: James Robideau — Signature — Month 12 Day 30 Year 11

Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator) U.S. EPA ID Number

Facility's Phone:

18c. Signature of Alternate Facility (or Generator) Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name — Signature — Month Day Year

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
VTP000014065	1	800-843-8265	004156226 FLE

GENERATOR

5. Generator's Name and Mailing Address
BURLINGTON INTERNATIONAL AIRPORT
1200 AIRPORT DRIVE, #1
SO BURLINGTON VT 05403
Generator's Phone: 802 863-2874

Generator's Site Address (if different than mailing address)
BURLINGTON INTERNATIONAL AIRPORT
5 DELAWARE STREET
SO. BURLINGTON VT 05403

6. Transporter 1 Company Name
ENVIRONMENTAL PROD & SVCS OF VT, INC
U.S. EPA ID Number
NYR000115733

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
ENVIRONMENTAL PROD & SVCS OF VT, INC
300 SMITH BLVD.
ALBANY NY 12202
Facility's Phone: 518 465-4000
U.S. EPA ID Number
NYD986971877

9a. HM	9b. U.S. DOT Description (Including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. RQ NA1993, Waste Fuel oil (NO. 2) Mixture, 3, PGIII	1	DF	15	G	D001
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1) APP #: A1211097-PFT. 1 X 15 GAL, ERG#128 The material is not considered a RCRA or State Hazardous waste in NYS
2) and is being shipped as an off-specification fuel product to be recycle/reclaimed as a fuel product.
3)
4) JOE#: V2380

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: KURT Miller
Signature: [signature]
Month: 12 Day: 30 Year: 11

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: James Robidoux
Signature: [signature]
Month: 12 Day: 30 Year: 11
Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name
Signature
Month Day Year

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

Appendix D

Building Materials Laboratory Data

ENDYNE Inc.
Environmental Laboratories

KAS, Inc.	
PO Box 787	100306
Williston, VT 05495	
Atten: Alan Liptak	

PROJECT: 509110229 Burlington Airport
WORK ORDER: **1202-02481**
DATE RECEIVED: February 24, 2012
DATE REPORTED: March 14, 2012
SAMPLER: Varies

Laboratory Report

Enclosed please find the results of the analyses performed for the samples referenced on the attached chain of custody. All required method quality control elements including instrument calibration were performed in accordance with method requirements and determined to be acceptable unless otherwise noted.

The column labeled Lab/Tech in the accompanying report denotes the laboratory facility where the testing was performed and the technician who conducted the assay. A "W" designates the Williston, VT lab under NELAC certification ELAP 11263; "R" designates the Lebanon, NH facility under certification NH 2037 and "N" the Plattsburgh, NY lab under certification ELAP 11892. "Sub" indicates the testing was performed by a subcontracted laboratory. The accreditation status of the subcontracted lab is referenced in the corresponding NELAC and Qual fields.

The NELAC column also denotes the accreditation status of each laboratory for each reported parameter. "A" indicates the referenced laboratory is NELAC accredited for the parameter reported. "N" indicates the laboratory is not accredited. "U" indicates that NELAC does not offer accreditation for that parameter in that specific matrix. Test results denoted with an "A" meet all National Environmental Laboratory Accreditation Program requirements except where denoted by pertinent data qualifiers. Test results are representative of the samples as they were received at the laboratory

Endyne, Inc. warrants, to the best of its knowledge and belief, the accuracy of the analytical test results contained in this report, but makes no other warranty, expressed or implied, especially no warranties of merchantability or fitness for a particular purpose.

Reviewed by:

Harry B. Locker, Ph.D.
Laboratory Director

Laboratory Report

DATE REPORTED: 03/14/2012

CLIENT: KAS, Inc.
PROJECT: 509110229 Burlington Airport

WORK ORDER: **1202-02481**
DATE RECEIVED 02/24/2012

001 Site: 13 Du — Date Sampled: 1/25/12 Time: 10:20

Parameter	Result	Units	Method	Analysis Date/Time	Lab/Tech	NELAC	Qual.
TCLP Extract-SVOA/Metals	Completed		EPA 1311	3/5/12	W LJF	A	
Lead, Total TCLP	< 0.20	mg/L	EPA 6010B	3/8/12	W MGT	A	

002 Site: 72 Du — Date Sampled: 1/25/12 Time: 12:00

Parameter	Result	Units	Method	Analysis Date/Time	Lab/Tech	NELAC	Qual.
TCLP Extract-SVOA/Metals	Completed		EPA 1311	3/5/12	W LJF	A	AN1
Lead, Total TCLP	< 0.20	mg/L	EPA 6010B	3/8/12	W MGT	A	

003 Site: 23 MS — Date Sampled: 2/22/12 Time: 11:15

Parameter	Result	Units	Method	Analysis Date/Time	Lab/Tech	NELAC	Qual.
TCLP Extract-SVOA/Metals	Completed		EPA 1311	3/5/12	W LJF	A	
Lead, Total TCLP	< 0.20	mg/L	EPA 6010B	3/8/12	W MGT	A	

004 Site: 6 ES — Date Sampled: 1/25/12 Time: 14:04

Parameter	Result	Units	Method	Analysis Date/Time	Lab/Tech	NELAC	Qual.
TCLP Extract-SVOA/Metals	Completed		EPA 1311	3/5/12	W LJF	A	
Lead, Total TCLP	< 0.20	mg/L	EPA 6010B	3/8/12	W MGT	A	

005 Site: 2 PS — Date Sampled: 1/19/12 Time: 9:20

Parameter	Result	Units	Method	Analysis Date/Time	Lab/Tech	NELAC	Qual.
TCLP Extract-SVOA/Metals	Completed		EPA 1311	3/5/12	W LJF	A	
Lead, Total TCLP	< 0.20	mg/L	EPA 6010B	3/9/12	W MGT	A	

006 Site: 6 PS — Date Sampled: 1/19/12 Time: 11:00

Parameter	Result	Units	Method	Analysis Date/Time	Lab/Tech	NELAC	Qual.
TCLP Extract-SVOA/Metals	Completed		EPA 1311	3/5/12	W LJF	A	
Lead, Total TCLP	1.3	mg/L	EPA 6010B	3/12/12	W MGT	A	

007 Site: 392 WS — Date Sampled: 2/22/12 Time: 10:12

Parameter	Result	Units	Method	Analysis Date/Time	Lab/Tech	NELAC	Qual.
TCLP Extract-SVOA/Metals	Completed		EPA 1311	3/5/12	W LJF	A	
Lead, Total TCLP	< 0.20	mg/L	EPA 6010B	3/12/12	W MGT	A	

Report Summary of Qualifiers and Notes

AN1: Insufficient sample mass was submitted for a full 100g TCLP extraction. The sample was tumbled as a TCLP screen. The sample was tumbled using TCLP extraction buffer #1. The pH determination step indicated the sample should have been tumbled using extraction buffer #2. The data associated with this extraction should be considered suspect.

ENDYNE, INC.
160 James Brown Drive
Williston, Vermont 05495
(802) 879-4333

CHAIN-OF-CUSTODY-RECORD

Special Reporting Instructions/PO#: KAS PO # 11110544

52132

Project Name: Burlington Airport Houses KAS # 509110229 State of Origin: VT X NY __ NH __ Other __ Endyne WO # 1202-02481	Client/Contact Name: KAS, Inc./Alan Liptak Phone #: 802-383-0486 Mailing Address: PO Box 787 Williston Vt 05495	Sampler Name: Various Phone #: 802-383-0486 Billing Address: KAS, Inc. PO Box 787 Williston Vt 05495

Sample Location	Matrix	GRAB	COMP	Date/Time Sampled	Sample Containers No.	Sample Containers Type/Size	Sample Preservation	Analysis Required	FieldResults/Remarks	Due Date
13 DU	Bldg Mat		X	1/25/12 1020	1	Bag	None	33		
72 DU			X	1/25/12 1200						
23 MS			X	2/22/12 1115						
6 ES			X	1/25/12 1404						
2 PS			X	1/19/12 0920						
6 PS			X	1/19/12 1100						
392 WS			X	2/22/12 1012						

Relinquished by:	Date/Time	Received by:	Date/Time	Received by:	Date/Time
A Liptak	2/24/12			Jane Parker	2/24/12 11:10

1	pH	6	TKN	11	Total Solids	16	Sulfate	21	1664 TPH/FOG	26	8270 PAH Only
2	Chloride	7	Total P	12	TSS	17	Coliform (Specify)	22	8015 GRO	27	8081 Pest
3	Ammonia N	8	Total Diss. P	13	TDS	18	COD	23	8015 DRO	28	8082 PCB
4	Nitrite N	9	BOD	14	Turbidity	19	VT PCF	24	8260B	29	PP13 Metals
5	Nitrate N	10	Alkalinity	15	Conductivity	20	VOC Halocarbons	25	8270 B/N or Acid	30	Total RCRA8
31	Metals (Total, Diss.) Ag, Al, As, B, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, Hg, K, Mg, Mn, Mo, Na, Ni, Pb, Sb, Se, Sn, Tl, U, V, Zn										
32	TCLP (volatiles, semi-volatiles, metals, pesticides, herbicides)					33	Other TCLP Pb				
34	Corrosivity	35	Ignitability	36	Reactivity	37	Other				
38	Other										

LAB USE ONLY
Delivery: Client
Temp: 1.6°C
Comment:

(White - Laboratory / Yellow - Client)

ENDYNE Inc.
Environmental Laboratories

KAS, Inc.	
PO Box 787	100306
Williston, VT 05495	
Atten: Alan Liptak	

PROJECT: 509110229 Burlington Airport
WORK ORDER: **1204-05203**
DATE RECEIVED: April 18, 2012
DATE REPORTED: April 30, 2012
SAMPLER: Amy King

Laboratory Report

Enclosed please find the results of the analyses performed for the samples referenced on the attached chain of custody. All required method quality control elements including instrument calibration were performed in accordance with method requirements and determined to be acceptable unless otherwise noted.

The column labeled Lab/Tech in the accompanying report denotes the laboratory facility where the testing was performed and the technician who conducted the assay. A "W" designates the Williston, VT lab under NELAC certification ELAP 11263; "R" designates the Lebanon, NH facility under certification NH 2037 and "N" the Plattsburgh, NY lab under certification ELAP 11892. "Sub" indicates the testing was performed by a subcontracted laboratory. The accreditation status of the subcontracted lab is referenced in the corresponding NELAC and Qual fields.

The NELAC column also denotes the accreditation status of each laboratory for each reported parameter. "A" indicates the referenced laboratory is NELAC accredited for the parameter reported. "N" indicates the laboratory is not accredited. "U" indicates that NELAC does not offer accreditation for that parameter in that specific matrix. Test results denoted with an "A" meet all National Environmental Laboratory Accreditation Program requirements except where denoted by pertinent data qualifiers. Test results are representative of the samples as they were received at the laboratory

Endyne, Inc. warrants, to the best of its knowledge and belief, the accuracy of the analytical test results contained in this report, but makes no other warranty, expressed or implied, especially no warranties of merchantability or fitness for a particular purpose.

Reviewed by:

Harry B. Locker, Ph.D.
Laboratory Director

Laboratory Report

DATE REPORTED: 04/30/2012

CLIENT: KAS, Inc.
PROJECT: 509110229 Burlington Airport

WORK ORDER: **1204-05203**
DATE RECEIVED 04/18/2012

001 Site: 57 DU Date Sampled: 4/13/12 Time: 10:30

Parameter	Result	Units	Method	Analysis Date/Time	Lab/Tech	NELAC	Qual.
TCLP Extract-SVOA/Metals	Completed		EPA 1311	4/24/12	W LG	A	
Lead, Total TCLP	< 0.20	mg/L	EPA 6010B	4/27/12	W LJF	A	

= ENDYNE, INC.
160 James Brown Drive
Williston, Vermont 05495
(802) 879-4333

CHAIN-OF-CUSTODY-RECORD

52134

Special Reporting Instructions/PO#: _____ (A)

Project Name: Burlington Airport Housing KAS # 509110229 State of Origin: VT X NY __ NH __ Other __ Endyne WO # 1204-05203	Client/Contact Name: KAS/Atin Lyptak Phone #: 802-383-0486 Mailing Address: PO Box 787 Williston VT 05495	Sampler Name: ~~Peta Schuyler~~ Amy King Phone #: 802-383-0486 Billing Address: PO Box 787 Williston VT 05495

Sample Location	Matrix	GRAB	COMP	Date/Time Sampled	Sample Containers No.	Sample Containers Type/Size	Sample Preservation	Analysis Required	FieldResults/Remarks	Due Date
57 Dw	Bldg Mat		X	4/13/12 1030	1	6oz/Jar	None	33		

Relinquished by:	Date/Time	Received by:	Date/Time	Received by:	Date/Time
	4/18/12 10:05		4/18/12 1115	Ellen Looney	4-18 @12:00

1	pH	6	TKN	11	Total Solids	16	Sulfate	21	1664 TPH/FOG	26	8270 PAH Only
2	Chloride	7	Total P	12	TSS	17	Coliform (Specify)	22	8015 GRO	27	8081 Pest
3	Ammonia N	8	Total Diss. P	13	TDS	18	COD	23	8015 DRO	28	8082 PCB
4	Nitrite N	9	BOD	14	Turbidity	19	VT PCF	24	8260B	29	PP13 Metals
5	Nitrate N	10	Alkalinity	15	Conductivity	20	VOC Halocarbons	25	8270 B/N or Acid	30	Total RCRA8
31	Metals (Total, Diss.) Ag, Al, As, B, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, Hg, K, Mg, Mn, Mo, Na, Ni, Pb, Sb, Se, Sn, Tl, U, V, Zn										
32	TCLP (volatiles, semi-volatiles, metals, pesticides, herbicides)					(33)	Other TCLP Lead				
34	Corrosivity	35	Ignitability	36	Reactivity	37	Other				
38	Other										

LAB USE ONLY
Delivery: Client
Temp: 2.5
Comment:

(White - Laboratory / Yellow - Client)

ENDYNE Inc.
Environmental Laboratories

KAS, Inc.	
PO Box 787	100306
Williston, VT 05495	
Atten: Alan Liptak	

PROJECT: 509110229 Burlington Airport
WORK ORDER: **1111-17384**
DATE RECEIVED: November 22, 2011
DATE REPORTED: December 14, 2011
SAMPLER: Jeremy Roberts/Amy King

Laboratory Report

Enclosed please find the results of the analyses performed for the samples referenced on the attached chain of custody. All required method quality control elements including instrument calibration were performed in accordance with method requirements and determined to be acceptable unless otherwise noted.

The column labeled Lab/Tech in the accompanying report denotes the laboratory facility where the testing was performed and the technician who conducted the assay. A "W" designates the Williston, VT lab under NELAC certification ELAP 11263; "R" designates the Lebanon, NH facility under certification NH 2037 and "N" the Plattsburgh, NY lab under certification ELAP 11892. "Sub" indicates the testing was performed by a subcontracted laboratory. The accreditation status of the subcontracted lab is referenced in the corresponding NELAC and Qual fields.

The NELAC column also denotes the accreditation status of each laboratory for each reported parameter. "A" indicates the referenced laboratory is NELAC accredited for the parameter reported. "N" indicates the laboratory is not accredited. "U" indicates that NELAC does not offer accreditation for that parameter in that specific matrix. Test results denoted with an "A" meet all National Environmental Laboratory Accreditation Program requirements except where denoted by pertinent data qualifiers. Test results are representative of the samples as they were received at the laboratory

Endyne, Inc. warrants, to the best of its knowledge and belief, the accuracy of the analytical test results contained in this report, but makes no other warranty, expressed or implied, especially no warranties of merchantability or fitness for a particular purpose.

Reviewed by:

Harry B. Locker, Ph.D.
Laboratory Director

Laboratory Report

DATE REPORTED: 12/14/2011

CLIENT: KAS, Inc.
PROJECT: 509110229 Burlington Airport

WORK ORDER: **1111-17384**
DATE RECEIVED 11/22/2011

001 Site: 5 D — Date Sampled: 11/17/11 0:00

Parameter	Result	Units	Method	Analysis Date/Time	Lab/Tech	NELAC	Qual.
TCLP Extract-SVOA/Metals	Completed		EPA 1311	12/5/11	W LJF	A	
Lead, Total TCLP	< 0.20	mg/L	EPA 6010B	12/13/11	W ETK	A	

002 Site: 10 NH — Date Sampled: 11/16/11 0:00

Parameter	Result	Units	Method	Analysis Date/Time	Lab/Tech	NELAC	Qual.
TCLP Extract-SVOA/Metals	Completed		EPA 1311	12/5/11	W LJF	A	
Lead, Total TCLP	1.2	mg/L	EPA 6010B	12/13/11	W ETK	A	

ENDYNE, INC.
160 James Brown Drive
Williston, Vermont 05495
(802) 879-4333

CHAIN-OF-CUSTODY-RECORD

52123

Special Reporting Instructions/PO#: LAS Po# 1110544

Project Name: Burlington Airport 50911022.9
State of Origin: VT X NY __ NH __ Other __
Endyne WO # 1111-17384

Client/Contact Name: Alan Liptak / KAS
Phone #: 802-383-0486
Mailing Address: PO Box 787 Williston VT 05495

Sampler Name: Jeremy Roberts / Amy Kirby
Phone #: 802-383-0486
Billing Address: PO Box 787 Williston VT 05495

Sample Location	Matrix	GRAB	COMP	Date/Time Sampled	Sample Containers No.	Sample Containers Type/Size	Sample Preservation	Analysis Required	FieldResults/Remarks	Due Date
5D	Solid	✓	X	11/17/11	1	1Gal	None	33		
10 NH	"		X	11/16/11	1	1Gal	None	33		

Relinquished by: [signature] Date/Time 11/21/11 1300
Received by: [signature] Date/Time 11/22/11 1035
Received by: Eileen Toomey Date/Time 11/22 @ 10:45

1	pH	6	TKN	11	Total Solids	16	Sulfate	21	1664 TPH/FOG	26	8270 PAH Only
2	Chloride	7	Total P	12	TSS	17	Coliform (Specify)	22	8015 GRO	27	8081 Pest
3	Ammonia N	8	Total Diss. P	13	TDS	18	COD	23	8015 DRO	28	8082 PCB
4	Nitrite N	9	BOD	14	Turbidity	19	VT PCF	24	8260B	29	PP13 Metals
5	Nitrate N	10	Alkalinity	15	Conductivity	20	VOC Halocarbons	25	8270 B/N or Acid	30	Total RCRA8
31	Metals (Total, Diss.) Ag, Al, As, B, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, Hg, K, Mg, Mn, Mo, Na, Ni, Pb, Sb, Se, Sn, Tl, U, V, Zn										
32	TCLP (volatiles, semi-volatiles, metals, pesticides, herbicides)					33	Other TCLP Lead				
34	Corrosivity	35	Ignitability	36	Reactivity	37	Other				
38	Other										

LAB USE ONLY
Delivery: Client
Temp: 18.4
Comment:

(White - Laboratory / Yellow - Client)

Page ____ of ____

Appendix E

Additional Phase II ESA Data

MEMORANDUM

TO: Jon Leinwohl, PE Stantec

FROM: Alan R. Liptak, CPG, KAS, Inc.

DATE: 23 February 2012

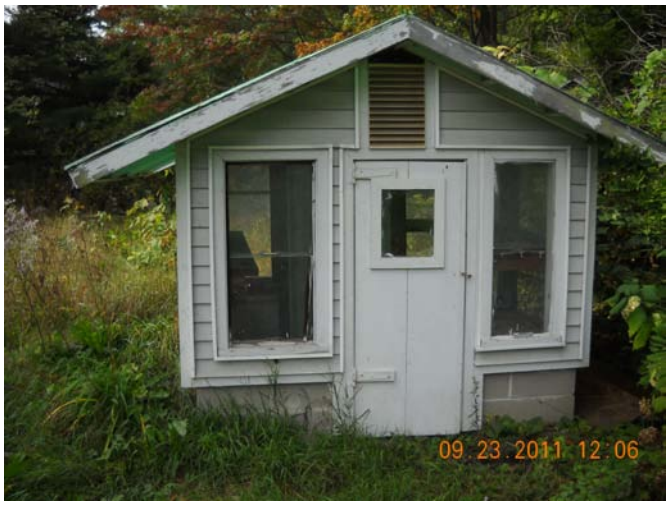
RE: Burlington International Airport House Removals
Buried Pipe in AIP 87, 392 White Street

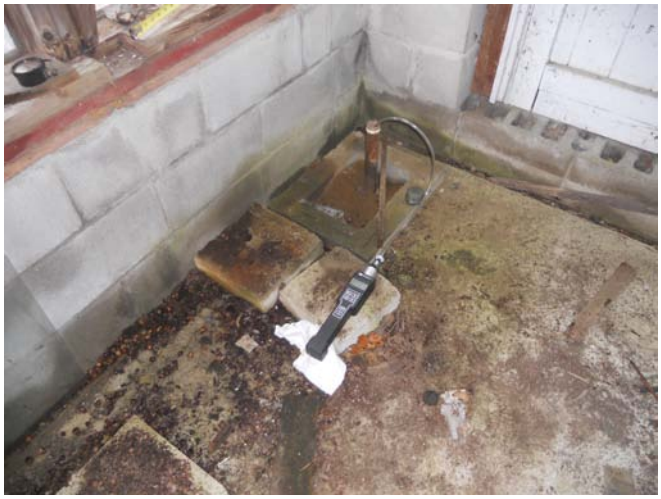
Confirming our meeting discussions today, following are findings and outcomes regarding a pipe in the ground at AIP 87. This memo can be given to the removal contractors as needed. Photos are attached.

AIP 87, 392 White Street: Current action needed: none.
A steel pipe in the floor of the greenhouse shed at 392 White Street was encountered during the asbestos inspection. Assessment of the pipe indicated that the pipe appears to be connected to a buried water tank. Miscellaneous steel fittings and a pressure gauge inside the greenhouse suggest that there had been an irrigation system inside and the water tank was most likely part of this system. The pipe was gauged and found to be 106" deep and containing approximately 24" of rusty water. There was no odor or other indication of petroleum or other substances, and a vapor reading using a photoionization device was at background levels of 0.2 parts per million, indicating no petroleum or other volatile chemicals present. During the building removals, the contractors should be notified of the presence of a buried water tank at this location which should be removed and scrapped as part of the house removal. No special approvals or notifications are required to do this.

Please contact me with any questions.

KAS #509110229





Photos showing greenhouse shed at 392 White Street and a pipe leading to a buried water tank. The tank was stuck and found to contain water. The PID reading of 0.2 ppm indicates no volatile chemicals or petroleum present.