

APPENDIX B

ASBESTOS RESPONSE GUIDE

Water & Waste Department

Response Guide
Safe Work Procedure Checklist
Suspected/Confirmed Asbestos Incident

1) Person Observing Suspected Damaged Asbestos

- Stop Work Immediately and leave vicinity of (suspected) asbestos disturbance**
- Secure Area – allow no access
- Leave all tools & equipment on site
- Lock doors to area (if possible)
- Inform Supervisor
- Contact Plant – Facility Supervisor
- Contact Operations Asbestos Contact Person
- Post warning sign at all entrances to area, warning of situation (Suspected Asbestos Containing Material release in the area)
- If after hours and neither Facility Supervisor or Operations Asbestos Contact Person can be reached, Call McPhillips Operator at 986-4781
- Do not proceed or disturb until clearance is given by an authorized person (Operations Asbestos Contact Person or Facility Supervisor or)

2) Immediate Supervisor

- Ensure that Work Stops Immediately
- Ensure that Area is Secure– allow no access
- Ensure that all tools & equipment are left on site
- Ensure that doors to area are locked (if possible)
- Ensure that Plant – Facility Supervisor is contacted
- Ensure that Operations Asbestos Contact Person is contacted
- Ensure Sign is posted at all entrances to area, warning of situation (Suspected Asbestos Containing Material release in the area)
- If after hours and neither Facility Supervisor or Operations Asbestos Contact Person can be reached, Call McPhillips Operator at 986-4781
- Do not proceed or disturb area until clearance is given by an authorized person (Operations Asbestos Contact Person or Facility Supervisor or Corporate Occupational Hygienist)
- Prepare draft of/Submit Accident Investigation report (City Website has a template to use as a guide for report preparation; must consult Operational Asbestos Contact Person & Departmental Safety Officer to review and advise on drafting Accident Investigation Report) to:
 - your Immediate Supervisor
 - the Facility Supervisor
 - the Departmental Safety Officer
 - the Operational Asbestos Contact Person

3) Facility Supervisor

- Ensure that Work Stops Immediately
- Ensure that Area is Secure– allow no access
- Ensure that Operations Asbestos Contact Person is contacted
- If experienced and properly trained, Facility Supervisor can assess situation for remedial action (e.g. consult WWD ACM Inventory database)
- If member of staff, contractor or public may have been exposed to airborne ACM – Discuss follow up options/advise individuals
 - Inform person(s) (suspected of being) exposed to airborne ACM of health risk (i.e. Asbestos is a known Carcinogen, etc.)
 - Inform person(s) (suspected of being) exposed to airborne ACM of right to file a ‘green card’ (Workers Compensation Board of Manitoba – Notice of Injury form)
 - Inform person(s) (suspected of being) exposed to airborne ACM of right to access the Occupational Health Nurse
- If member of staff, contractor or public are confirmed to have been exposed to airborne ACM – the incident is classified as a ‘reportable incident’ under the Workplace Health and Safety Legislation of Manitoba. The incident must be reported to WH&S immediately. This report is a phone call and is responsibility of Facility Supervisor: Must contact WH&S Officer at (204) 945-3446 or after hours call (204) 945-0581 to report facts of situation and follow direction provided by the WH&S Officer
- Also, if member of public is confirmed to have been exposed to airborne ACM – the incident must be reported to the Province’s Public Health Department immediately. This report is a phone call and is responsibility of Facility Supervisor: Must contact Public Health at (204) 788-6701 to report facts of situation and follow direction provided by the Public Health Officer
- If situation is deemed suspected or confirmed as airborne ACM, confirm that ACM remedial action is complete prior to authorizing access to area. Do not proceed or disturb area until clearance is given by an authorized person (Operations Asbestos Contact Person or Corporate Occupational Hygienist)
- If there have been personnel exposed to airborne ACM, forward prepared Accident Investigation report to your Immediate Supervisor
- (If required) Prepare draft of /Submit Incident Investigation report for submission to WH&S. (Note: Operational Asbestos Contact Person & Departmental Safety Officer must be consulted to review and advise on drafting Incident Investigation Report)

4) Operations Asbestos Contact Person (Wastewater Services: Steve Kussy; Water Services: Dan Wiwchar)

- Ensure that Work Stops Immediately
- Ensure that Area is Secure– allow no access
- Assess situation for remedial action (e.g. consult WWD ACM Inventory database) (if beyond experience or training do not proceed or disturb until clearance is given by an authorized person - contact Corporate Occupational Hygienist)
- If situation is deemed suspected or confirmed airborne ACM, arrange for testing of material and/or finish remedial action prior to authorizing access to area
- (If required) Ensure that the Facility Supervisor contacts WH&S. In the event that the Facility Supervisor can not contact the WH&S Officer this responsibility becomes the Operations Asbestos Contact Person: Must contact at the WH&S Officer. (see Facility Supervisor responsibilities for details)
- (If required) Ensure that the Facility Supervisor contacts the Public Health Officer. In the event that the Facility Supervisor can not contact the Public Health Officer this responsibility is the Operations Asbestos Contact Person: Must contact Public Health (see Facility Supervisor responsibilities for details)
- (If required) Assist Facility Supervisor in drafting Incident Investigation report to WH&S
- Forward Accident Investigation and Incident Report to Departmental Asbestos Contact Person

5) Departmental Asbestos Contact Person (Geoffrey Patton)

- Oversee Departmental Asbestos Containing Materials Operations & Maintenance Program
- Record incident report(s) for inclusion in annual report to Corporate Safety and Hygiene

6) Departmental Safety Person

- (As required) Advise persons preparing incident and accident reports

7) McPhillips Operator (After Hours Call Center) 986-4781

- Complete Asbestos Incident Report while on phone with person reporting the incident (see Asbestos Incident Notification Report attached)
- Carry out call out actions as listed on report form (Notify required supervisors)
- Forward copy of Asbestos Incident Notification Report to Departmental Asbestos Contact Person next business day (Geoffrey Patton)

**City of Winnipeg
Water and Waste Department
Winnipeg Manitoba**

**Work Procedures
for
Misplaced Asbestos**

O H G
Consulting





Practical Occupational Hygiene Solutions for your Business

John Elias, MPH, CIH, ROH, CRSP • (204) 261-1770
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DATE November 5, 2009

Project 09-J-742

Terry Miller
Safety Officer
Water and Waste Department
109-1199 Pacific Ave.
Winnipeg MB R3E 3S8

Dear Mr. Miller:

Re: Work Procedures for Misplaced Asbestos

OHG Consulting Inc. is pleased to submit our Occupational Hygiene Report work procedures when asbestos or materials labeled as asbestos are found in unauthorized areas. Should you have any questions or require additional assistance please contact Mr. John Elias.

Yours truly,

For OHG Consulting Inc.

A handwritten signature in black ink, appearing to read 'J. Elias', is written over a light grey rectangular background.

John Elias, MPH, CIH, ROH, CRSP
Occupational Hygienist

Occupational Hygiene Report

Work Procedures for Misplaced Asbestos

**City of Winnipeg
Water and Waste Department**

OHG Project Number 09-J-742

Date of Report: November 25, 2009

Survey Performed by:

**John Elias, MPH, CIH, ROH, CRSP
OHG Consulting Inc.
121 Keedian Drive
East St. Paul MB
R2E 0K3**

City of Winnipeg Water and Waste Department Winnipeg Manitoba

Work Procedures for Misplaced Asbestos

Background

The current *Asbestos Disposal Procedure for Brady Landfill Staff* will continue in use as written. The following procedures are to address conditions when a waste hauler fails to identify asbestos containing materials and disposes of it in an unapproved location, or where a hauler misidentifies waste by using an asbestos bag for non-asbestos containing materials.

The following guidelines are for friable asbestos. Friable asbestos is a material that is easily crushed to form particulates that can become airborne. Non-friable materials such as floor tiles do not present a significant risk if not crushed. These materials if identified should be covered as soon as possible by any means that will minimize breakage.

Procedure for Misplaced Asbestos

The Problem: If asbestos containing materials are not properly identified to the weighmaster and is unloaded as general waste it could result in unnecessary asbestos exposure to the public, city staff, and other workers at the site or downwind of the site.

The Solution

1. As soon as suspected asbestos containing materials (ACM) are found, the Foreman or other staff will be notified immediately, and the immediate area quarantined until the problem has been resolved.
2. If the material can become airborne it should be covered with a tarpaulin until the
3. The waste should be inspected to determine if the waste is in fact asbestos.
 - All personnel shall be cleared from downwind of the site.
 - The Foreman or Supervisor will then remove all traffic from the area and continue the regular disposal operation in an area up-wind from the ACM.
 - Staff will approach the site from upwind to minimize the potential for exposure and secure the area. The suspected material will be visually inspected by consultant. If the material is identified as ACM, proceed to the next step. If the material is identified as not being ACM, treat it as regular waste.
 - If the material cannot be readily identified a sample will be collected for analysis by a consultant.
 - The area should be posted "Warning Asbestos" until the area has been declared safe.

4. If the waste has been identified as ACM, it should be covered using methods similar to the existing procedures.
 - A disposal pit should be prepared to receive the material. The pit should be located as close to the ACM as possible, downwind of the material. The excavator should be positioned so that fugitive dusts will not blow on the operator.
 - The ACM should be pushed into the prepared pit. To reduce bag breakage, the bags themselves should not be pushed. The pushing blade should be positioned so that it will include a layer of soil underneath of the ACM. The same method should be used if the ACM is not bagged, but is loose.
 - The remainder of the cover should then be placed over the ACM
5. The location of the ACM should be surveyed and logged for future reference.
6. At anytime during the process, become disturbed or airborne, the Foreman or Supervisor will suspend the operation immediately, and take preventive steps such as wetting the ACM.
7. If assistance is needed to identify risks and hazards or develop a remediation plan for any of the above steps call OHG Consulting at:
261-1770 or
291-5789
8. If assistance is required to handle suspected ACM materials call Powervac at:
632-4433

Procedure Misidentified asbestos

The Problem: If non-asbestos containing waste is disposed of in asbestos waste bags it creates an unknown condition that may create an unknown risk to anyone at the site.

The Solution

1. When bags marked as containing asbestos are found, they must be treated as though they do contain asbestos until proven otherwise.
2. As soon as asbestos bags are found, the Foreman or Supervisor will be notified immediately, and the immediate area quarantined until the problem has been resolved.
3. The bags should be inspected to determine if they contain asbestos or some nonhazardous building wastes.
 - All personnel shall be cleared from downwind of the site.
 - The Foreman or Supervisor will then remove all traffic from the area and continue the regular disposal operation in an area up-wind from the ACM.
 - Staff shall wear protective clothing (suits and respirator) during the inspection.
 - Staff will approach the site from upwind to minimize the potential for exposure.
 - The suspected material will be visually inspected by consultant. If the material is identified as ACM, treat as misplaced asbestos waste.
 - If the material cannot be readily identified a sample can be collected for analysis by consultant.

- The area should be posted “Warning Asbestos” until the area has been declared safe.
4. If the material is identified as not being ACM:
 - The bags marked as containing asbestos waste should be placed in asbestos pit..
 - The bags should be covered as soon as possible so that they will not be seen by uninformed persons and the issue revisited.
 5. The location of the ACM should be logged for future reference.
 6. for assistance and to identify risks and hazards or develop a remediation plan for any of the above steps call OHG Consulting at:
261-1770 or
291-5789
 7. If assistance is required to handle suspected ACM materials call Powervac at:
632-4433

The following are the draft text portions that could be used in a poster for onsite workers.



Water and Waste Department

Asbestos Response Guide

What should I do if I suspect that unmarked asbestos has been inappropriately dumped at the landfill site?

- ✓ Notify your Foreman or Supervisor and quarantine the area.
- ✓ Cover with a tarpaulin if the material can be spread by the wind.
- ✓ Determine if it is in fact asbestos. Follow safe work procedures.
- ✓ If it is asbestos, do not move unnecessarily and bury where it is.
- ✓ Log the location of the site.
- ✓ If assistance is needed to identify risks and hazards or develop a remediation plan for any of the above steps call OHG Consulting at:
261-1770 or
291-5789
- ✓ If assistance is required to handle suspected ACM materials call Powervac at:
632-4433



Water and Waste Department

Asbestos Response Guide

What should I do if I find asbestos waste bags in an inappropriate location?

- ✓ Notify your Foreman or Supervisor and quarantine the area.
- ✓ Determine if it is in fact asbestos. Follow safe work procedures.
- ✓ If the bags contain asbestos follow instructions for inappropriately dumped asbestos.
- ✓ If the bags do not contain asbestos, handle as normal waste.
- ✓ Log the location of the site.
- ✓ If assistance is needed to identify risks and hazards or develop a remediation plan for any of the above steps call OHG Consulting at:
261-1770 or
291-5789
- ✓ If assistance is required to handle suspected ACM materials call Powervac at:
632-4433

APPENDIX C

VECTOR AND WILDLIFE CONTROL RECORD FORM

APPENDIX D

SURFACE WATER TEST PARAMETERS

TABLE 12-1 Surface Water Analytical Testing Parameters

Parameter	Method	D.L.	Units
<i>Dissolved Metals</i>			
Aluminum (Al)-Dissolved	U.S. EPA 200.8-DL	0.002	mg/L
Antimony (Sb)-Dissolved	U.S. EPA 200.8-DL	0.0002	mg/L
Arsenic (As)-Dissolved	U.S. EPA 200.8-DL	0.0002	mg/L
Barium (Ba)-Dissolved	U.S. EPA 200.8-DL	0.0002	mg/L
Beryllium (Be)-Dissolved	U.S. EPA 200.8-DL	0.0002	mg/L
Bismuth (Bi)-Dissolved	U.S. EPA 200.8-DL	0.0002	mg/L
Boron (B)-Dissolved	U.S. EPA 200.8-DL	0.01	mg/L
Cadmium (Cd)-Dissolved	U.S. EPA 200.8-DL	0.00001	mg/L
Calcium (Ca)-Dissolved	U.S. EPA 200.8-DL	0.05	mg/L
Cesium (Cs)-Dissolved	U.S. EPA 200.8-DL	0.0001	mg/L
Chromium (Cr)-Dissolved	U.S. EPA 200.8-DL	0.002	mg/L
Cobalt (Co)-Dissolved	U.S. EPA 200.8-DL	0.0002	mg/L
Copper (Cu)-Dissolved	U.S. EPA 200.8-DL	0.0002	mg/L
Iron (Fe)-Dissolved	U.S. EPA 200.8-DL	0.1	mg/L
Lead (Pb)-Dissolved	U.S. EPA 200.8-DL	0.00009	mg/L
Lithium (Li)-Dissolved	U.S. EPA 200.8-DL	0.002	mg/L
Magnesium (Mg)-Dissolved	U.S. EPA 200.8-DL	0.01	mg/L
Manganese (Mn)-Dissolved	U.S. EPA 200.8-DL	0.0001	mg/L
Mercury (Hg)-Dissolved	EPA245.7 V2.0	0.00005	mg/L
Molybdenum (Mo)-Dissolved	U.S. EPA 200.8-DL	0.0001	mg/L
Nickel (Ni)-Dissolved	U.S. EPA 200.8-DL	0.001	mg/L
Phosphorus (P)-Dissolved	U.S. EPA 200.8-DL	0.1	mg/L
Potassium (K)-Dissolved	U.S. EPA 200.8-DL	0.02	mg/L
Rubidium (Rb)-Dissolved	U.S. EPA 200.8-DL	0.0002	mg/L
Selenium (Se)-Dissolved	U.S. EPA 200.8-DL	0.001	mg/L
Silicon (Si)-Dissolved	U.S. EPA 200.8-DL	0.05	mg/L
Silver (Ag)-Dissolved	U.S. EPA 200.8-DL	0.0001	mg/L
Sodium (Na)-Dissolved	U.S. EPA 200.8-DL	0.02	mg/L
Strontium (Sr)-Dissolved	U.S. EPA 200.8-DL	0.0001	mg/L
Tellurium (Te)-Dissolved	U.S. EPA 200.8-DL	0.0002	mg/L
Thallium (Tl)-Dissolved	U.S. EPA 200.8-DL	0.0001	mg/L
Thorium (Th)-Dissolved	U.S. EPA 200.8-DL	0.0001	mg/L
Tin (Sn)-Dissolved	U.S. EPA 200.8-DL	0.0002	mg/L
Titanium (Ti)-Dissolved	U.S. EPA 200.8-DL	0.0002	mg/L
Tungsten (W)-Dissolved	U.S. EPA 200.8-DL	0.0002	mg/L
Uranium (U)-Dissolved	U.S. EPA 200.8-DL	0.0001	mg/L
Vanadium (V)-Dissolved	U.S. EPA 200.8-DL	0.0002	mg/L
Zinc (Zn)-Dissolved	U.S. EPA 200.8-DL	0.002	mg/L
Zirconium (Zr)-Dissolved	U.S. EPA 200.8-DL	0.0004	mg/L
Chromium, Hexavalent	EPA 7199	0.01	mg/L
<i>Routine Parameters</i>			

TABLE 12-1 Surface Water Analytical Testing Parameters

Parameter	Method	D.L.	Units
Chloride	EPA 300.1 IC	0.2	mg/L
Sulfate	EPA 300.1 IC	0.5	mg/L
Alkalinity, Total	titration to pH 4.5 endpoint		mg/L
Alkalinity, Bicarbonate	in water by titration		mg/L
Calcium Hardness,	calculated		mg/L
Total Hardness,	calculated		mg/L
Turbidity	by Nephelometer		ntu
pH	in water or wastewater by laboratory pH		pH Units
Nitrogen,	Total by High Temperature Oxidation		mg/L
Carbon, Total Organic	by High Temperature Oxidation		mg/L
Solids, Total Suspended			mg/L
Solids, Total Dissolved	at 180 C.		mg/L
Solids, Total			mg/L
Specific Conductance	at 25°C		µS/cm
Ammonia, Total,	Low Level by FIA, filtered		mg/L
Nitrate + Nitrite Nitrogen,	Flow Injection Analysis, filtered		mg/L
Phosphorus, Total	by Automated Ascorbic Acid Reduction		mg/L
Nitrogen, Total Kjeldahl	Nitrogen by CFA		mg/L
Microbiological Parameters			
Total Coliforms	APHA 9223	0	MPN/100mL
Escherichia Coli	APHA 9223 QT	0	MPN/100mL

APPENDIX E

GROUND WATER TEST PARAMETERS

TABLE 15-1 Ground Water Analytical Testing Parameters

Parameter	Method	D.L.	Units
<i>Dissolved Metals</i>			
Aluminum (Al)-Dissolved	U.S. EPA 200.8-DL	0.002	mg/L
Antimony (Sb)-Dissolved	U.S. EPA 200.8-DL	0.0002	mg/L
Arsenic (As)-Dissolved	U.S. EPA 200.8-DL	0.0002	mg/L
Barium (Ba)-Dissolved	U.S. EPA 200.8-DL	0.0002	mg/L
Beryllium (Be)-Dissolved	U.S. EPA 200.8-DL	0.0002	mg/L
Bismuth (Bi)-Dissolved	U.S. EPA 200.8-DL	0.0002	mg/L
Boron (B)-Dissolved	U.S. EPA 200.8-DL	0.01	mg/L
Cadmium (Cd)-Dissolved	U.S. EPA 200.8-DL	0.00001	mg/L
Calcium (Ca)-Dissolved	U.S. EPA 200.8-DL	0.05	mg/L
Cesium (Cs)-Dissolved	U.S. EPA 200.8-DL	0.0001	mg/L
Chromium (Cr)-Dissolved	U.S. EPA 200.8-DL	0.002	mg/L
Cobalt (Co)-Dissolved	U.S. EPA 200.8-DL	0.0002	mg/L
Copper (Cu)-Dissolved	U.S. EPA 200.8-DL	0.0002	mg/L
Iron (Fe)-Dissolved	U.S. EPA 200.8-DL	0.1	mg/L
Lead (Pb)-Dissolved	U.S. EPA 200.8-DL	0.00009	mg/L
Lithium (Li)-Dissolved	U.S. EPA 200.8-DL	0.002	mg/L
Magnesium (Mg)-Dissolved	U.S. EPA 200.8-DL	0.01	mg/L
Manganese (Mn)-Dissolved	U.S. EPA 200.8-DL	0.0001	mg/L
Mercury (Hg)-Dissolved	EPA245.7 V2.0	0.00005	mg/L
Molybdenum (Mo)-Dissolved	U.S. EPA 200.8-DL	0.0001	mg/L
Nickel (Ni)-Dissolved	U.S. EPA 200.8-DL	0.001	mg/L
Phosphorus (P)-Dissolved	U.S. EPA 200.8-DL	0.1	mg/L
Potassium (K)-Dissolved	U.S. EPA 200.8-DL	0.02	mg/L
Rubidium (Rb)-Dissolved	U.S. EPA 200.8-DL	0.0002	mg/L
Selenium (Se)-Dissolved	U.S. EPA 200.8-DL	0.001	mg/L
Silicon (Si)-Dissolved	U.S. EPA 200.8-DL	0.05	mg/L
Silver (Ag)-Dissolved	U.S. EPA 200.8-DL	0.0001	mg/L
Sodium (Na)-Dissolved	U.S. EPA 200.8-DL	0.02	mg/L
Strontium (Sr)-Dissolved	U.S. EPA 200.8-DL	0.0001	mg/L
Tellurium (Te)-Dissolved	U.S. EPA 200.8-DL	0.0002	mg/L
Thallium (Tl)-Dissolved	U.S. EPA 200.8-DL	0.0001	mg/L
Thorium (Th)-Dissolved	U.S. EPA 200.8-DL	0.0001	mg/L
Tin (Sn)-Dissolved	U.S. EPA 200.8-DL	0.0002	mg/L
Titanium (Ti)-Dissolved	U.S. EPA 200.8-DL	0.0002	mg/L
Tungsten (W)-Dissolved	U.S. EPA 200.8-DL	0.0002	mg/L
Uranium (U)-Dissolved	U.S. EPA 200.8-DL	0.0001	mg/L
Vanadium (V)-Dissolved	U.S. EPA 200.8-DL	0.0002	mg/L
Zinc (Zn)-Dissolved	U.S. EPA 200.8-DL	0.002	mg/L
Zirconium (Zr)-Dissolved	U.S. EPA 200.8-DL	0.0004	mg/L
Chromium, Hexavalent	EPA 7199	0.01	mg/L
<i>Volatile Organic Compounds</i>			

TABLE 15-1 Ground Water Analytical Testing Parameters

Parameter	Method	D.L.	Units
1,1,1,2-Tetrachloroethane	SW846 8260	0.5	ug/L
1,1,1-Trichloroethane	SW846 8260	0.5	ug/L
1,1,2,2-Tetrachloroethane	SW846 8260	0.5	ug/L
1,1,2-Trichloroethane	SW846 8260	0.5	ug/L
1,1-Dichloroethane	SW846 8260	0.5	ug/L
1,1-Dichloroethylene	SW846 8260	0.5	ug/L
1,2-Dichlorobenzene	SW846 8260	0.5	ug/L
1,2-Dichloroethane	SW846 8260	0.5	ug/L
1,2-Dichloroethane d4	SW846 8260	1	%
1,2-Dichloropropane	SW846 8260	0.5	ug/L
1,3-Dichlorobenzene	SW846 8260	0.5	ug/L
1,4-Dichlorobenzene	SW846 8260	0.5	ug/L
2-Hexanone	SW846 8260	20	ug/L
4-Bromofluorobenzene	SW846 8260	1	%
Acetone	SW846 8260	20	ug/L
Benzene	SW846 8260	0.5	ug/L
Bromodichloromethane	SW846 8260	0.5	ug/L
Bromoform	SW846 8260	0.5	ug/L
Bromomethane	SW846 8260	1	ug/L
Carbon Disulfide	SW846 8260	0.5	ug/L
Carbon tetrachloride	SW846 8260	0.5	ug/L
Chlorobenzene	SW846 8260	0.5	ug/L
Dibromochloromethane	SW846 8260	0.5	ug/L
Chloroethane	SW846 8260	1	ug/L
Chloroform	SW846 8260	0.5	ug/L
Chloromethane	SW846 8260	1	ug/L
cis-1,2-Dichloroethylene	SW846 8260	0.5	ug/L
cis-1,3-Dichloropropene	SW846 8260	0.5	ug/L
Dichlorodifluoromethane	SW846 8260	1	ug/L
Ethyl Benzene	SW846 8260	0.5	ug/L
1,2-Dibromoethane	SW846 8260	0.5	ug/L
m+p-Xylenes	SW846 8260	1	ug/L
Methyl Ethyl Ketone	SW846 8260	20	ug/L
Methyl Isobutyl Ketone	SW846 8260	20	ug/L
MTBE	SW846 8260	0.5	ug/L
Dichloromethane	SW846 8260	0.5	ug/L
o-Xylene	SW846 8260	0.5	ug/L
Styrene	SW846 8260	0.5	ug/L
Tetrachloroethylene	SW846 8260	0.5	ug/L
Trihalomethanes (total)	SW846 8260	2	ug/L
Toluene	SW846 8260	0.5	ug/L
Toluene-d8	SW846 8260	1	%
trans-1,2-Dichloroethylene	SW846 8260	0.5	ug/L
trans-1,3-Dichloropropene	SW846 8260	0.5	ug/L
Trichloroethylene	SW846 8260	0.5	ug/L
Trichlorofluoromethane	SW846 8260	1	ug/L

TABLE 15-1 Ground Water Analytical Testing Parameters

Parameter	Method	D.L.	Units
Vinyl chloride	SW846 8260	0.5	ug/L
Xylenes (Total)	SW846 8260	1.5	ug/L
Polycyclic Aromatic Hydrocarbons			
1-Methyl Naphthalene	EPA SW 846/8270-GC/MS	0.00002	mg/L
2-Methyl Naphthalene	EPA SW 846/8270-GC/MS	0.00002	mg/L
Acenaphthene	EPA SW 846/8270-GC/MS	0.00002	mg/L
Acenaphthene d10	EPA SW 846/8270-GC/MS	1	%
Acenaphthylene	EPA SW 846/8270-GC/MS	0.00002	mg/L
Acridine	EPA SW 846/8270-GC/MS	0.00002	mg/L
Acridine d9	EPA SW 846/8270-GC/MS	1	%
Anthracene	EPA SW 846/8270-GC/MS	0.00001	mg/L
B(a)P Total Potency Equivalent	EPA SW 846/8270-GC/MS	0.00003	mg/L
Benzo(a)anthracene	EPA SW 846/8270-GC/MS	0.00001	mg/L
Benzo(a)pyrene	EPA SW 846/8270-GC/MS	0.000005	mg/L
Benzo(b&j)fluoranthene	EPA SW 846/8270-GC/MS	0.00001	mg/L
Benzo(g,h,i)perylene	EPA SW 846/8270-GC/MS	0.00002	mg/L
Benzo(k)fluoranthene	EPA SW 846/8270-GC/MS	0.00001	mg/L
Chrysene	EPA SW 846/8270-GC/MS	0.00002	mg/L
Chrysene d12	EPA SW 846/8270-GC/MS	1	%
Dibenzo(a,h)anthracene	EPA SW 846/8270-GC/MS	0.000005	mg/L
Fluoranthene	EPA SW 846/8270-GC/MS	0.00002	mg/L
Fluorene	EPA SW 846/8270-GC/MS	0.00002	mg/L
Indeno(1,2,3-cd)pyrene	EPA SW 846/8270-GC/MS	0.00001	mg/L
Naphthalene	EPA SW 846/8270-GC/MS	0.00005	mg/L
Naphthalene d8	EPA SW 846/8270-GC/MS	1	%
Phenanthrene	EPA SW 846/8270-GC/MS	0.00005	mg/L
Phenanthrene d10	EPA SW 846/8270-GC/MS	1	%
Pyrene	EPA SW 846/8270-GC/MS	0.00001	mg/L
Quinoline	EPA SW 846/8270-GC/MS	0.00002	mg/L
Polychlorinated Biphenyls			
Aroclor 1016	APHA 6410B	0.00005	mg/L
Aroclor 1221	APHA 6410B	0.00005	mg/L
Aroclor 1232	APHA 6410B	0.00005	mg/L
Aroclor 1242	APHA 6410B	0.00005	mg/L
Aroclor 1248	APHA 6410B	0.00005	mg/L
Aroclor 1254	APHA 6410B	0.00005	mg/L
Aroclor 1260	APHA 6410B	0.00005	mg/L
Aroclor 1262	APHA 6410B	0.00005	mg/L
Aroclor 1268	APHA 6410B	0.00005	mg/L
Decachlorobiphenyl	APHA 6410B	1	%
Total PCBs	APHA 6410B	0.00005	mg/L

TABLE 15-1 Ground Water Analytical Testing Parameters

Parameter	Method	D.L.	Units
Organochlorine Pesticides			
o,p-DDT	SW846 8270	0.1	ug/L
p,p-DDD	SW846 8270	0.1	ug/L
p,p-DDE	SW846 8270	0.1	ug/L
p,p-DDT	SW846 8270	0.1	ug/L
Aldrin	SW846 8270	0.02	ug/L
Aldrin + Dieldrin	SW846 8270	0.04	ug/L
alpha-Chlordane	SW846 8270	0.1	ug/L
Chlordane (Total)	SW846 8270	0.3	ug/L
DDT + metabolites	SW846 8270	0.4	ug/L
Dieldrin	SW846 8270	0.02	ug/L
Lindane	SW846 8270	0.1	ug/L
gamma-Chlordane	SW846 8270	0.1	ug/L
Heptachlor	SW846 8270	0.1	ug/L
Heptachlor + Heptachlor Epoxide	SW846 8270	0.2	ug/L
Heptachlor epoxide	SW846 8270	0.1	ug/L
Methoxychlor	SW846 8270	0.1	ug/L
Oxychlordane	SW846 8270	0.1	ug/
d14-Terphenyl	SW846 8270	1	
Routine Parameters			
Chloride	EPA 300.1 IC	0.2	mg/L
Sulfate	EPA 300.1 IC	0.5	mg/L
Alkalinity, Total	titration to pH 4.5 endpoint		mg/L
Alkalinity, Bicarbonate	in water by titration		mg/L
Calicum Hardness,	calculated		mg/L
Total Hardness,	calculated		mg/L
Turbidity	by Nephelometer		ntu
pH	in water or wastewater by laboratory pH		pH Units
Nitrogen,	Total by High Temperature Oxidation		mg/L
Carbon, Total Organic	by High Temperature Oxidation		mg/L
Solids, Total Suspended			mg/L
Solids, Total Dissolved	at 180 C.		mg/L
Solids, Total			mg/L
Specific Conductance	at 25°C		µS/cm
Ammonia, Total,	Low Level by FIA, filtered		mg/L
Nitrate + Nitrite Nitrogen,	Flow Injection Analysis, filtered		mg/L
Phosphorus, Total	by Automated Ascorbic Acid Reduction		mg/L
Nitrogen, Total Kjeldahl	Nitrogen by CFA		mg/L
Microbiological Parameters			

APPENDIX F

INFRASTRUCTURE DAMAGE REPORT

APPENDIX G

FIRE EXTINGUISHER INVENTORY AND MAINTENANCE

APPENDIX H

DAILY EQUIPMENT INSPECTION LOG

**Daily Inspection
Unit 373-8681**

Meter _____

Date _____

Sticker _____

Inspected By _____

OK	Requires Attention	
_____	_____	Check Coolant Level and Check for Leaks
_____	_____	Check Engine Oil Level and Check for Leaks
_____	_____	Check Transmission Oil Level and Check for Leaks
_____	_____	Check Hydraulic Oil Level and Check for Leaks
_____	_____	Inspect and Clean Engine air filter and pre cleaner
_____	_____	Walk around inspection, check for Damage
_____	_____	Check for fuel leaks
_____	_____	Check Final drives, clean debris from Seal Area
_____	_____	Inspect Seat Belt
_____	_____	Test Operation of all Indicators and Gauges
_____	_____	Check Back Up Alarm Operation
_____	_____	Test Horn
_____	_____	Check all Lights and Beacon Operation
_____	_____	Check all Glass, W/Wipers and Washers
_____	_____	Check Operation of Service and Park Brakes
_____	_____	Check First aid kit and fire extinguisher
_____	_____	Inspect fire suppression system
_____	_____	Check Steering Operation

Comments _____

Please Fax to 488-4172 Daily

**Daily Inspection
Unit 403-1202**

Meter _____

Date _____

Sticker _____

Inspected By _____

OK

Requires Attention

Check Coolant Level and for Leaks

Check Engine Oil Level and for Leaks

Check Transmission Oil Level and for Leaks

Check Hydraulic Oil Level and for Leaks

Walk around inspection, check for Damage

Check Final drives, clean debris from Seal Area

Inspect Seat Belt

Test Operation of all Indicators and Gauges

Check Back Up Alarm Operation

Test Horn

Check all Lights

Check all Glass, W/Wipers and Washers

Check Operation of Service and Park Brakes

Check Steering Operation

Tighten all Wheel Cleaner Bolts

Comments _____

Please Fax to 488-4172 Daily