



GracePacificLLC

A SUBSIDIARY OF ALEXANDER & BALDWIN, INC.

INCOMING MATERIAL SCREENING PROCEDURES

**Grace Pacific Makakilo Recycling Facility
H-1 Exit 3, Palehua Road
Kapolei, Hawaii 96707**

**Telephone (808) 674-6590
Facsimile (808) 693-7107**

February 7, 2019

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INCOMING MATERIAL SCREENING PROCEDURES

**Grace Pacific Makakilo Recycling Facility
H-1 Exit 3, Palehua Road, Kapolei, Hawaii 96707
Telephone (808) 674-6590 / Fax (808) 693-7107**

Grace Pacific Makakilo Recycling Facility operates in accordance with the solid waste management facility permit issued by the State of Hawaii Department of Health (DOH) Office of Solid Waste Management (Permit Number RY-0063-16). The Facility is permitted to accept clean asphalt, concrete, and asphalt slurry. The acceptance criteria and procedures are outlined below.

I.0 ACCEPTANCE CRITERIA FOR INCOMING MATERIALS

Prior to completing the Request for Clearance Number form, the generator must determine whether the material is acceptable to be recycled at the Facility or not. A description of acceptable and unacceptable materials is presented in Attachment A.

Painted or glazed material is acceptable; however, the below criteria must be met.

- A representative sample(s) of each distinct color or type of paint has been collected and analyzed for total lead using a State of Hawaii Department of Health-approved United States Environmental Protection Agency (EPA) SW-846 method or a pre-demolition survey has been conducted using an x-ray fluorescence (XRF) instrument. Do not submit Toxicity Characteristic Leaching Procedure (TCLP) lead results.
- The sampling of each distinct color or type of paint has been conducted by a Qualified Environmental Scientist (QES). The Facility reserves the right to accept or reject the qualifications of the QES. The QES must meet at least one of the following requirements:
 - A bachelor's degree in environmental science, environmental studies, geology, engineering, or a related field from an accredited institution and five years or more of applicable experience.
 - A master's degree in environmental science, environmental studies, geology, engineering, or a related field from an accredited institution and two to five years or more of applicable experience.
 - Experience with solid and hazardous waste management, field sampling, scientific data interpretation and analysis, and state and federal environmental laws, rules, regulations, policies, and procedures.
 - A certification such as a Professional Geologist or Professional Engineer or other certification indicating advanced training in a relevant field.
- The concentration of total lead in the paint samples is less than 5,000 parts per million (ppm).
- A complete copy of the laboratory report or pre-demolition survey is submitted with the completed Incoming Material Profile Form.
- If XRF measurements are used, an instrument specific calibration sheet, such as a HUD Performance Characteristics Sheet, must be included with the results of the survey. In addition, confirmation paint chip samples for laboratory analysis must be collected where

XRF measurements are inconclusive. If paint chip samples are not collected and analyzed, then the associated material will be considered positive for lead-based paint.

- If lead-based paint has been abated from the material, a clearance report or equivalent documentation must be provided. Based on the results documented in the clearance report or equivalent documentation, abated material may be accepted without additional sampling and analysis.

2.0 INCOMING RECYCLABLE MATERIAL PROCEDURES

STEP 1 – SUBMIT REQUEST FOR CLEARANCE NUMBER FORM. The generator shall submit a completed *Request for Clearance Number Form* (Attachment B). The *Request for Clearance Number Form* should be emailed to MaterialOrder@gracepacific.com.

If the incoming materials are painted, the generator shall complete the additional sections on the form and include a complete copy of the laboratory analytical report and/or pre-demolition survey with XRF measurements.

STEP 2 – PAYMENT OPTIONS. The generator needs to ensure that a method of payment, such as a credit card or an open account, is on file with Grace Pacific. If the generator is unsure whether a method of payment is on file, please contact Grace Pacific at MaterialOrder@gracepacific.com, (808) 674-6590.

STEP 3 – INSPECTION. The Facility reserves the right to inspect all structures prior to demolition. Generators must inform the Facility when the structures are available for inspection **prior to demolition**. If the structures have already been demolished, Facility personnel shall be permitted to inspect the incoming (demolished) materials prior to acceptance.

STEP 4 – RECEIVE CLEARANCE NUMBER. Following review and approval of the submitted *Request for Clearance Number Form* by the Facility, a Clearance Number may be issued to the generator. The Facility reserves the right to reject any materials that are determined to be unsuitable for acceptance based on the information submitted by the generator. In addition, the Facility reserves the right to inspect all structures prior to demolition and/or transportation.

STEP 5 – NOTIFICATION. Following issuance of a clearance number, the generator shall notify the Facility at least 24 hours prior to transportation of materials for recycling. Contact information of the appropriate Grace Pacific personnel is listed below.

Facility Personnel	Phone Number	Fax	Email
Material Order	(808) 674-6590	(808) 693-7107	MaterialOrder@gracepacific.com
Ms. Margaret D'Entremont	(808) 693-7104	-	-

STEP 6 – TRANSPORT MATERIAL. Prior to transporting approved material to the Facility, the trucking company must complete the Grace Pacific trucking agreement and provide requested information concerning each truck used to transport material to the Facility.

Approved material transported to the Facility shall be segregated by material type, no mixing of materials will be permitted. Only issued Clearance Numbers with a leading “P” are allowed

to contain painted material. Incoming painted material may be tested by Grace Pacific using a LeadCheck® type swab to verify that it is not lead-based.

The truck driver will provide the Clearance number to the scale house attendant, will issue a scale tag and direct the transporter to the appropriate area for unloading. Facility personnel will inspect each load to insure that only acceptable material is present.

QUESTIONS. If there are any questions regarding the procedures described above, please contact Grace Pacific at MaterialOrder@gracepacific.com, (808) 674-6590.

A price sheet for material recycling is included in Attachment C.

ATTACHMENT A
Acceptable and Unacceptable Materials List

Acceptable Materials



Asphalt

- Includes roadway, sidewalk, and parking lot material.
- Loads must not be mixed and cannot contain soil.



Concrete

- Includes sidewalk, curb, gutter, and concrete building material.
- Rebar within the concrete is acceptable. No more than 1 foot of rebar may be exposed.
- Large pieces are acceptable.
- Loads must not be mixed and cannot contain soil.



Painted Concrete and Asphalt

- Accepted if analytical data confirms it is not lead-based paint.
- Only clearance numbers denoted with a "P" are permitted to contain painted material.



Asphalt Slurry

- Consists of slurry collected during the grinding, grooving, and/or saw cutting of asphalt.

Unacceptable Materials



Material Coated with Lead-Based Paint

- Paint that contains 5,000 parts per million lead or greater.



Metal

- Loose metal pieces, such as metal posts or beams, are unacceptable. However, rebar contained within concrete is acceptable.



Bricks



Municipal Trash

Unacceptable Materials



Green Waste and Soil

- Includes branches, grass, trees, and other green waste.
- Loose soil within the load is not acceptable.



Hazardous Materials

- Includes, but not limited to, asbestos-containing materials, polychlorinated biphenyls (PCBs), infectious waste, and radioactive materials.
- Any material that fails the TCLP test for any hazardous characteristic (ignitability, corrosivity, reactivity, or toxicity). Example: material that fails TCLP test for lead.



Ceramic

- Includes, but not limited to, floor tile, roof tile, pipes, and pottery.



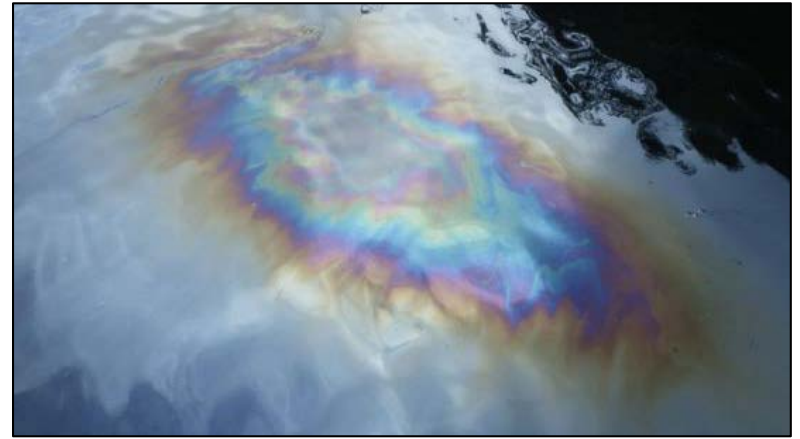
Pesticide Contaminated Materials

- Includes, but not limited to, concrete slabs poured prior to 1980.

Unacceptable Materials



Concrete Slurry



Asphalt Slurry with Oily Sheen

ATTACHMENT B
Request for Clearance Number Form



A SUBSIDIARY OF ALEXANDER & BALDWIN, INC.

REQUEST FOR CLERANCE NUMBER FORM

Grace Pacific Makakilo Recycling Facility

H-1 Exit 3, Palehua Road, Kapolei, Hawaii

Telephone Number: (808) 674-6590

Fax Number: (808) 693-7107

For Facility Use Only:

Accepted

Declined

I. Generator Information:

Jobsite Address *(with zipcode)*:

Building/Property Owner:

Generator/Contractor:

Generator Address:

Generator Contact Person:

Phone:

Email:

2. Billing Information:

Company:

Billing Address:

Job/P.O. Number:

Contact Person:

Title:

Signature:

Date:

Phone Number:

Email:

3. Incoming Material Information:

Uses of the site (current and historical). *Check all that apply.* Attach additional information as necessary.

- | | | |
|---------------------------------------|---|-------------------------------------|
| <input type="checkbox"/> Residential | <input type="checkbox"/> Commercial | <input type="checkbox"/> Industrial |
| <input type="checkbox"/> Agricultural | <input type="checkbox"/> Automotive/Service Station | <input type="checkbox"/> Military |

Type of Material:

- | | |
|--|---|
| <input type="checkbox"/> Concrete (sidewalk, curb, gutter, and concrete building material) | <input type="checkbox"/> Asphalt slurry (from polishing, grinding, and grooving asphalt pavement) |
| <input type="checkbox"/> Asphalt (roadway, sidewalk, and parking lot material) | |

Is the material Painted?	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<i>If yes, attach laboratory report or pre-demolition survey for painted materials or a clearance report or equivalent documentation for abated materials</i>
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Total Lead Range (Min – Max)		ppm		ppm
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Sample Date:	Sampler's Name and Employer:
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Describe Sampling Procedures:

Does the material include any contaminants , including, but not limited to: PCBs, Asbestos, Pesticides, Metal, Trash, Green Waste, Wood, Petroleum, Hazardous/Infectious/Radioactive Waste, or other chemical contamination?	<input type="checkbox"/> Yes <input type="checkbox"/> No
---	--

If yes, provide description of Contaminants:

Estimated Total Amount of Material (indicate tons or cubic yards):

Date Ready for Inspection:	Est. Date of Demolition:
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4. Transporter Information:

Use additional sheets to list all of your approved transportation companies for this delivery.

Transportation Company:	Email:
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Transportation Contact Person:	Phone:
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Method of Shipment for Asphalt or Concrete:	<input type="checkbox"/> Truck	<input type="checkbox"/> Other (Describe):
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Method of Shipment for Asphalt Slurry:	<input type="checkbox"/> Vacuum Truck	<input type="checkbox"/> Drum, Tote, or Other Liquid Container	<input type="checkbox"/> Other (Describe):
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Anticipated Date of Delivery:

5. Certification:

By signing this Incoming Material Profile Form, the generator, demolition contractor, transporter, and qualified environmental scientist certify the following:

- A. The material described above is not Hazardous Waste as defined by the EPA or State of Hawaii.
- B. The material described above does not contain PCBs, Asbestos, pesticides, metal, rubbish, green waste, wood, petroleum, hazardous/infectious/radioactive waste, or other chemical contamination.
- C. The information disclosed in this form and attachments contain true and accurate descriptions of the material.
- D. All relevant information regarding known or suspected hazards associated with the material known by the Generator has been disclosed.
- E. The analytical data attached to this form were derived from testing representative samples collected as described in the Incoming Material Screening Procedures.
- F. If any changes occur in the character of the material, the Generator shall notify Facility personnel immediately.
- H. Grace Pacific reserves the right to refuse material at any time based on our discretion.

Generator Name:	Title:
Signature:	Date:
Demolition Contractor Name:	Title:
Signature:	Date:
Qualified Environmental Scientist Name:	Title:
Signature:	Date:

FOR RECYCLING FACILITY USE ONLY

Clearance No:	Entered By:	Date:
Inspection Date:	<input type="checkbox"/> Approved <input type="checkbox"/> Declined	Initials: <input type="text"/> Date: <input type="text"/>
Scale:	Entered By:	Date:
Comments:		

- A. Clearance Numbers will be issued from 7:30 a.m. to 3:00 p.m., Monday through Friday, except holidays. A Clearance Number is required prior to scheduling delivery of the material.
- B. Phone at least 24 hours prior to transporting material to the Recycling Facility.
- C. All Clearance Numbers will expire 6 months after issuance. Generators must submit a new Request for Clearance Number Form for approval prior to the expiration date.

ATTACHMENT C
Price Sheet for Recycling

PRICE SHEET FOR MATERIAL RECYCLING

Grace Pacific Makakilo Recycling Facility
H-1 Exit 3, Palehua Road, Kapolei, Hawaii 96707
Telephone (808) 674-6590 / Facsimile (808) 693-7107

Crusher-Ready Material: Crusher-ready material consists of clean concrete or asphalt with **no co-mingling**, no exposed rebar (less than one inch is acceptable), and no pieces larger than 24" x 24" x 24".

Asphalt	Concrete
\$13.00	\$13.00
per ton	per ton

Over-Sized Material: Over-sized material consists of hard to handle and non-conforming asphalt and concrete loads.

Asphalt	Concrete	Footings	Pile Caps
\$15.00	\$15.00	\$19.00	\$19.00
per ton	per ton	per ton	per ton

Asphalt Slurry: Asphalt slurry generated during the grinding, grooving, and saw cutting of asphalt cement. Load must contain asphalt slurry only, mixed loads will not be accepted. Please call for a price quote.

Loads Containing Unacceptable Material: Loads containing less than 95% asphalt or concrete materials will not be accepted. If the load was dropped onto the ground, a \$75 re-loading fee will be assessed. If a load of asphalt slurry containing unacceptable material is unloaded into the retention pond, additional environmental clean-up costs will be billed on a case by case basis.

Grace Pacific LLC reserves the right to refuse a load at their discretion. If the load was dropped onto the ground, a \$75 reloading fee will be assessed. Further charges for hand labor may be billed on a per hour basis.

All prices are FOB and are subject to applicable sales tax. Grace Pacific LLC reserves the right to change pricing at any time. Please contact Grace Pacific at MaterialOrder@gracepacific.com, (808) 674-6590 for an up-to-date price quote.

ATTACHMENT D
Incoming Painted Material Analysis Procedures



GracePacificLLC

A SUBSIDIARY OF ALEXANDER & BALDWIN, INC.

INCOMING PAINTED MATERIAL ANALYSIS PROCEDURES

**Grace Pacific Makakilo Recycling Facility
H-1 Exit 3, Palehua Road
Kapolei, Hawaii 96707**

**Telephone (808) 674-6590
Facsimile (808) 693-7107**

February 7, 2019

INCOMING PAINTED MATERIAL ANALYSIS PROCEDURES

**Grace Pacific Makakilo Recycling Facility
H-1 Exit 3, Palehua Road, Kapolei, Hawaii 96707
Telephone (808) 674-6590/ Facsimile (808) 693-7107**

I.0 ANALYSIS PROCEDURES FOR ACCEPTED PAINTED MATERIAL

Upon acceptance of painted material, the load will be directed to a dedicated painted material stockpiling area and separated from the unpainted, unprocessed materials.

Field screening procedures are conducted to ensure that accepted material does not contain lead-based paint. Incoming painted material will be randomly tested on an as-needed basis using a LeadCheck® swab to verify that it is not lead-based. The LeadCheck® swab is a screening tool to determine lead presence on painted surfaces based on a reaction between lead and a lead reactive reagent. The analysis procedure is described below:

1. If the surface is dirty, clean the surface with a household cleaner, rinse, and dry.
2. Peel or score the paint, if possible, to expose paint surfaces.
3. Activate the swab according to the instructions.
4. Rub the activated swab across the surface of the paint.
5. Examine the swab tip for a color change to pink or red. The lead concentration can be estimated by visually comparing the swab color to the color gradation table. Solid pink or red suggests a lead concentration higher than 0.5%, while white or pale pink suggest a lead concentration less than 0.3%.
6. If the swab tip suggests a lead concentration less than 0.5% (or 5,000 parts per million), the material can be transported to the clean unprocessed stockpiles for further processing. Log the analysis activity in the Accepted Material Analysis Log.
7. If the swab tip suggests lead concentrations in the paint at levels higher than 0.5% (or 5,000 parts per million), a paint chip sample may be collected for laboratory analysis of total lead to verify whether the paint is lead-based.
8. If material is determined to contain lead-based paint, it will either be disposed of at the permitted landfill or returned to the generator. A written report will be generated and submitted to the State of Hawaii Department of Health (DOH) Solid and Hazardous Waste Branch (SHWB) for DOH's records.
9. If the material is determined to contain lead-based paint, then all painted material from that sources will be tested using the LeadCheck® swabs to verify that it is does not contain lead-based paint.

2.0 LEADCHECK®REPORTING REQUIREMENTS

If the results of the field screening test and/or the laboratory analytical results suggest a concentration of lead in paint higher than 0.5% (or 5,000 parts per million), a written report will be generated and signed by Facility personnel. The written report shall consist of the following information:

- Source of material
- Material Profile Form completed by the generator
- Laboratory analytical report submitted by the generator
- Laboratory chain-of custody submitted by the generator
- Date of material acceptance
- Date of swab analysis
- Maker and type of swab
- Result of swab analysis
- Personnel conducting the swab analysis
- Material disposal procedure

An annual report will be submitted to the DOH describing the operations conducted at the Facility for each fiscal year (July 1 through June 30). The annual report will include the total tonnage for each type of material that the recycling facility received, processed, rejected, recycled, and disposed of. Also included will be the destination of all hazardous, or otherwise unacceptable materials leaving the recycling facility and a summary of incidents that occurred outside of normal operations. The annual report will be submitted by July 31 each year to the DOH at the following address:

State of Hawaii Department of Health
Environmental Management Division
Solid and Hazardous Waste Branch
P.O. Box 3378
Honolulu, Hawaii 96801-3378

APPENDIX A:

LeadCheck© Swab Testing Procedures

GENERAL INSTRUCTIONS – PLEASE READ CAREFULLY

3M™ LeadCheck™ Swabs provide the user a convenient method to detect lead on any solid surface such as steel or any other metal structure, wood, brick, cement, plaster, or drywall. 3M™ LeadCheck™ Swabs also detect lead solder, lead leaching from porcelain enameled fixtures (sinks, tubs) and vinyl mini-blinds. This innovative test swab can alert the user to the presence of hazardous levels of lead so that the proper precautions can be taken to avoid the harmful effects of lead. 3M™ LeadCheck™ is a screening test. It is not intended to be a quantitative test for lead. Please consult a certified laboratory to quantify a 3M™ LeadCheck™ result.

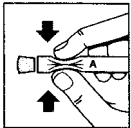
3M™ LeadCheck™ Swabs contain two glass ampoules of testing chemicals. For ALL TESTING APPLICATIONS, use the steps found in HOW TO USE 3M™ LeadCheck™ – ACTIVATION.

3M™ LeadCheck™ Swabs have an indefinite shelf life.

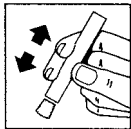
NOTE: SEE INSTRUCTIONS FOR SPECIFIC SURFACE TESTING. LIQUID CAN DISCOLOR SURFACES BEING TESTED.

HOW TO USE 3M™ LEADCHECK™ SWABS

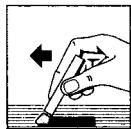
ACTIVATION



1.) **CRUSH:** Squeeze and crush points marked “A” and “B” located on the barrel of the swab.



2.) **SHAKE AND SQUEEZE:** With the porous fiber swab tip facing down, shake twice and squeeze gently until the yellow liquid comes to the tip of the swab – the swab is now activated for testing.



3.) **RUB:** While squeezing gently, rub the swab on the test area for 30 seconds.

TEST RESULTS

a) **If the swab tip and/or test surface, turn pink or red the test is positive** – A HAZARDOUS LEVEL OF LEAD IS PRESENT. In general, when the swab is used immediately after activation, the darker the developed pink color, the higher the lead content.

b) **If the swab or test area shows no pink or red color change, the test is negative** – Lead is not detected in this test area. You should confirm that the swab is active by using the test confirmation card (see instructions below). Also read the section on lead chromate in the instructions for specific surface testing.

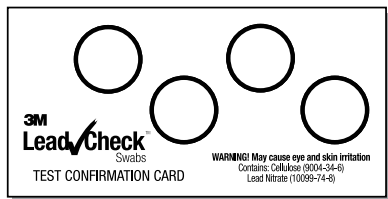
For each swab, all tests must be completed within two (2) minutes.

NOTE: 1. *Swabs must be used immediately after being activated.*
2. *Once developed, swabs are not reusable.*

HOW TO CONFIRM A 3M™ LEADCHECK™ RESULT

TEST CONFIRMATION CARD

Included with the 3M™ LeadCheck™ Swabs test kit is a test confirmation card. **On each card are dots containing a small amount of lead.** The test confirmation card is a quality assurance measure to confirm the reactivity of the 3M™ LeadCheck™ reagents when the test result is negative.



CONFIRMATION OF A NEGATIVE RESULT

If the swab tip does NOT turn pink or red after rubbing the test area, squeeze a drop of the 3M™ LeadCheck™ reagent onto one of the test dots.

If a pink or red color appears on the confirmation card dot, the swab was activated properly and lead was not detected.

If the test dot does not turn pink or red, the test was invalid and must be repeated with a new 3M™ LeadCheck™ Swab.

Use the confirmation card to verify negative results only.

INSTRUCTIONS FOR SPECIFIC SURFACE TESTING

FOR EXPANDED INSTRUCTIONS AND OTHER APPLICATIONS PLEASE VISIT WWW.3MLEADCHECK.COM

PLEASE READ THOROUGHLY

The EPA recognizes that when used by certified renovator, 3M™ LeadCheck™ Swabs can reliably determine that regulated lead based paint is not present on wood, ferrous metal (alloys that contain iron), or drywall and plaster surfaces.

1. PAINTED SURFACES

Lead-containing paint is still used for many industrial applications, most commonly as a surface coating to steel structures, concrete or wooden materials. Old oil varnishes and lacquers may also contain lead. 3M™ LeadCheck™ Swabs reliably detect lead in paints at 0.5% (5,000 ppm). 3M™ LeadCheck™ Swabs may indicate lead in some paint films as low as 0.06% (600ppm).

To test any painted surface

- Clean and remove all dust and dirt from the area to be tested.
- With a clean knife or scraper, cut a small ¼” notch at a diagonal to expose all painted layers down to the bare surface – lead may be present in any layer of paint.
- Rub the activated swab in the exposed cross-section for 30 seconds. If any of the layers contain water soluble lead pigments (lead oxide, lead carbonate), a positive result will occur; the swab and/or surface will turn pink or red.

NOTE: To activate a swab, see steps 1 through 3 in General Instructions.

2. LEAD CHROMATE

Marine and industrial paints as well as other materials may contain lead chromate (CR+6). Lead chromate paints are typically red, yellow, green, or orange in color. 3M™ LeadCheck™ Swabs will indicate the presence of lead in these paints. However, since lead chromate is virtually insoluble in water, it can take up to 18 hours (overnight) for the pink color to appear on the swab tip and/or the surface tested. In general, as lead chromate concentration decreases, 3M™ LeadCheck™ Swabs color development time increases. When lead chromate paint is suspected, or a 3M™ LeadCheck™ Swab result on a painted surface is initially negative (no color develops on the swab or at the test location within 30-60 seconds), squeeze a drop of 3M™ LeadCheck™ reagent onto one of the unused dots on the confirmation card to confirm the reactivity of 3M™ LeadCheck™ reagents. **DO NOT touch the tip of the swab to the dot on the card. If the dot turns pink, the 3M™ LeadCheck™ reagents are active and proceed as follows:**

- Place the swab in a plastic bag. If possible, reexamine the test swab and or area after 30 minutes, 60 minutes, or even the next morning for any color development. **OR**

- Collect a paint chip from the suspect surface and crush on a clean piece of plastic wrap. Activate the 3M™ LeadCheck™ Swab and rub the tip directly into the crushed paint chip and if possible jam some of the paint chips into the swab tip.

Place the swab and paint chips into a plastic bag and seal. Examine the swab tip periodically up to 18 hours for color development. As the 3M™ LeadCheck™ reagents react with any Lead Chromate, the pink color will become more intense.

3. PAINT ON DRYWALL (GYPSUM) AND PLASTER SURFACES

Sulfates present in drywall (gypsum) and plaster dust can interfere with 3M™ LeadCheck™ Swabs color development. It is possible with a minimum amount of care to accurately test for lead paint on plaster surfaces with 3M™ LeadCheck™ Swabs.

- With a clean utility knife, make a nickel sized half circle cut at a low angle (about 5 degrees) cutting down to the bare drywall (gypsum) and plaster core to expose all layers of paint. Make the cut as seen in figure A.
- Fold down the semicircular flap with the knife blade so that it forms a pocket.
- Using an activated 3M™ LeadCheck™ Swab, hold the swab above the cut allowing the 3M™ LeadCheck™ reagent to flow into the pocket making sure that the liquid contacts all layers of paint both in the cut itself and the peeled back flap. Carefully rub the swab around the periphery of the



peeled back flap, taking care not to contact the drywall (gypsum) or plaster. Only rub the swab on all layers of paint found on the flap. Do not rub the swab in the pocket.

- If lead is present, a pink or red color will develop along the edges of the cut, flap, or swab tip usually within 30 seconds.
- If no pink or red color develops, immediately confirm the negative result by squeezing a drop of the 3M™ LeadCheck™ reagent onto one of the confirmation card dots. It should turn red immediately.

Reverse side for additional instructions



Instruction Manual

DISCLAIMER

3M™ LeadCheck™ Swabs is a screening test for lead and should not be considered quantitative. Under controlled laboratory conditions, 3M™ LeadCheck™ Swabs will indicate the presence of lead as low as 1-2 micrograms. Under the conditions described in the instructions, 3M™ LeadCheck™ Swabs will detect high levels of leachable lead. Use of this test is not intended to replace a professional inspection. No guarantees are intended or implied.

3M Construction and Home Improvement Markets Division
3M Center
Building 223-4S-02
St. Paul, MN 55144-1000
1-800-494-3552
www.3MLeadCheck.com
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LIMITATION OF LIABILITY

The manufacturer assumes no liability for the misuse of 3M™ LeadCheck™ Swabs or for the interpretation of the results by the user. If lead contamination is suspected based on this test, consult a professional testing laboratory, a deleading specialist or your local Department of Public Health.

WARNING! May cause eye and skin irritation. Contains: Water (7732-18-5), Tartaric Acid (87-69-4), disodium Tartrate dehydrate (6106-24-7), Cellulose (9004-34-6), Lead Nitrate (10099-74-8).

Confirmation card:

Contains a chemical known to cause cancer, birth defects and other reproductive harm.

PRECAUTIONS: Avoid eye contact and skin contact. Avoid breathing of dust. Use only with adequate ventilation. Do not swallow. Wash thoroughly after handling.

KEEP OUT OF REACH OF CHILDREN.

FIRST AID INFORMATION:

Eye contact: Flush eyes with large amounts of water. If signs/symptoms persist, get medical attention.

Skin Contact: Wash affected area with soap and water. If signs/symptoms develop, get medical attention.

Inhalation: If signs/symptoms develop, remove person to fresh air, if they persist, get medical attention.

If Swallowed: Do not induce vomiting. Get medical attention.

For additional product safety and health information, call 1-651-737-6501.

4. RED SURFACES / RED LEAD

“Bleeding” may occur when testing surface is painted red. However the color that rubs off a surface is often visibly different from the pink to red color that develops when a 3M™ LeadCheck™ Swab detects lead.

The easiest way to test for bleeding is to CRUSH VIAL “B” ONLY, and bring a drop of the clear colorless fluid to the tip of the swab. Rub the tip of the swab on the surface. Any color that appears on the tip has “bled” from the test surface and may make reading the test results difficult.

NOTE: Red Lead Primer applied to steel structures typically has a lead content greater than 50%. This instantly turns the 3M™ LeadCheck™ Swab tip a bright cherry red color that is easy to distinguish from the brick red color that can “bleed” from the primer onto the swab tip.

5. PLUMBING SOLDER AND METAL ALLOYS

3M™ LeadCheck™ Swabs will detect lead in solder and other metal alloys. In plumbing applications, solder is considered “Lead Free” when the lead content is less than 0.2%. 3M™ LeadCheck™ Swabs will always turn pink when the lead concentration is at least 0.2%.

The following procedure is a test for lead in plumbing solder. Rubbing the swab for too long or hard on a prepared solder surface may cause a metallic film to collect on the swab tip. By lightly rubbing or dabbing the 3M™ LeadCheck™ reagent on the solder surface, the swab tip will turn pink first when lead is present, and then turn a purple color which may obscure the pink, if tin is present. If a purple color is obtained the test must be repeated with a new 3M™ LeadCheck™ Swab.

- Using an emery cloth or fine sandpaper, lightly score the surface to be tested.
- Wipe off the solder joint with a paper towel or cloth.
- Activate the 3M™ LeadCheck™ Swab (see GENERAL INSTRUCTIONS).
- Squeeze and maintain pressure on the swab barrel to keep a drop of the (yellow/orange) 3M™ LeadCheck™ reagent at the swab tip.
- Touch the drop of 3M™ LeadCheck™ reagent to the prepared solder surface and lightly brush with the swab tip. DO NOT RUB.
- If pink is observed on the swab tip lead is present.

6. DUST SCREENING

Dust containing lead can be present at hazardous levels in the presence of lead paint. 3M™ LeadCheck™ Swabs can be used to screen for lead dust. Testing for lead is especially important following maintenance, renovation or lead paint abatement projects. Cleaning the area until a negative result is obtained will save time and money and reduce the likelihood of failing a final test by inspection authorities as well as provide an ongoing visual assessment as the cleaning process proceeds.

Testing dust on nonleaded surfaces (wood, plastic or metal)

- Activate the 3M™ LeadCheck™ Swab (see General Instructions).
- Rub the activated swab in the dust for 30 seconds. If the dust contains lead, the swab will turn pink to red.

Testing dust on leaded surfaces (material painted with lead-based paint)

- Collect a small sample of dust on a plastic dish or piece of plastic wrap.
- Activate the 3M™ LeadCheck™ Swab (see General Instructions).
- Rub the activated swab in the dust for 30 seconds. If the dust contains lead, a positive result will occur.

Note: Dark colored dust may obscure color development on the swab tip. If so, gather some of the dust on a porous paper towel and drip some liquid from an activated swab on to the dust. If lead is present the liquid will wick away from the pile of dust showing pink to red staining on the paper towel.

7. TESTING FOR LEAD IN VINYL PRODUCTS

3M™ LeadCheck™ Swabs are a very sensitive screening test that will detect the presence of leachable lead in vinyl. To test for lead in a vinyl product:

- Abrade or scratch through all of the layers of the item being tested. Lead is often found below the surface.
- Activate a 3M™ LeadCheck™ Swab (see General Instructions).
- While gently squeezing the barrel of the swab, vigorously rub the abraded surface of the vinyl for 30-60 seconds.

Any pink color that appears on the test surface or the swab tip indicates the presence of lead. The color may be uneven due to the “clumping” of the inorganic lead salt. The color may become darker with time as the 3M™ LeadCheck™ reagent penetrates the surface. Some lead pigments are very insoluble. Allow longer development time before assuming a negative result. Orange is not a positive result for lead.

8. TESTING FOR LEAD IN ELECTRONICS

The test surface should be clean; free of dirt, fingerprints, oil, flux or other impurities. If necessary clean the surface with a suitable solvent or flux remover at room temperature. The surface should be dry before testing. For best results score the surface with a clean blade or glass cutter. (See video illustrating testing at www.3MLeadCheck.com)

- Activate the 3M™ LeadCheck™ Swab (see General Instructions).
- While squeezing gently to keep the 3M™ LeadCheck™ reagent at the swab tip rub the solder surface vigorously.
- If pink is observed on the tip of the swab lead is present in the solder at >0.1%.

- Clean the board with a defluxer or flux remover. Allow the solvent to run off the board. Let the board dry before soldering or using the component.

NOTE: Rubbing the swab too hard or too long may cause a metallic film to accumulate on the swab tip. This may obscure the color change of the 3M™ LeadCheck™ reagent. If this occurs the test must be repeated with a new 3M™ LeadCheck™ Swab.

9. DETECTION OF LEAD DEPOSITS ON FABRIC, CLOTHING, OR RUGS

- Dip the porous tip of a dry unactivated 3M™ LeadCheck™ Swab into water. Touch tip of swab to a paper towel to remove excess water.
- Rub damp swab vigorously over area of rug or clothing exposed to lead for about 30 seconds.
- Activate the swab (see General Instructions).
- While squeezing gently to keep drop of the (yellow/orange) 3M™ LeadCheck™ reagent at the swab tip, rub on a piece of waxed paper, plastic wrap, or a clean white plastic dish for about 30 seconds.
- Examine the tip of the swab for development of a pink color.
- Pale pink indicates the presence of a minimum of 1-2µg of lead ion (Pb⁺⁺) on the area tested.

APPENDIX B:
LeadCheck© Swab Testing Log

