

; 02/12/13 3:36 PM

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;;;learning times

AT 2:00 P.M. ET. >> IN A MOMENT, I'LL GO AHEAD AND START THE MEETING.

ACTUALLY, I SHOULD SAY RECORD THE MEETING.

I WANT TO REMIND EVERYBODY THAT YOU CAN USE WHAT'S RIGHT NOW THE CHAT WINDOW IS AN OPEN CHAT.

WE'RE GOING TO MOVE THAT OVER, CLOSE THAT DOWN AND WE'LL HAVE A MODERATED CHAT.

AND YOU'LL BE ABLE TO USE THAT WINDOW TO ASK ANY QUESTIONS AND ALSO IF YOU'RE HAVING ANY TECHNICAL DIFFICULTY, JUST GO AHEAD AND PUT IT IN THAT SORT OF Q&A WINDOW.

YOU'LL SEE THAT IN JUST A SECOND.

AND WE'LL GO AHEAD AND FOLLOW UP AS APPROPRIATE.

AT THIS TIME, I'M GOING TO TURN THINGS OVER TO JENNY ARENA WHO WILL GO AHEAD AND GET US STARTED BY INTRODUCING ALICE.

THE FLOOR IS YOURS.

>> I WILL TRY TO SPEAK UP.

IT SOUNDS LIKE WE'RE COMING IN A LITTLE QUIET, SO KEEP LETTING US NOW HOW IT'S SOUNDING, WE'LL TRY TO FIX THAT.

SO WELCOME BACK, GUYS.

WE ARE AFTER TODAY OVER HALFWAY THROUGH ON THIS COURSE.

THANK YOU FOR JOINING US.

TODAY IS OF COURSE OUR THIRD WEBINAR IN THE COURSE RISK EVALUATION, FIRST STEP IN DISASTER PLANNING.

THIS COURSE, AS YOU KNOW, IS PART OF A SERIES CALLING FOR YESTERDAY'S TREASURES TODAY.

IT'S BEEN MADE POSSIBLE BY LAURA

BUSH 21ST CENTURY LIBRARIAN
GRANT FROM THE INSTITUTE OF
MUSEUM AND LIBRARY SERVICES.
WE'RE SO FORTUNATE TO THIS
LEARNING TIMES ON BOARD TO
PRODUCE THESE WEBINARS AND HELP
US OUT WITH THAT WEBSITE I HOPE
YOU GUYS ARE USING.
WE'LL GO TO A MODERATED CHAT,
BUT FOR NOW, EVERYBODY FEEL FREE
TO INTRODUCE YOURSELF.
WE HAVE OVER 200 PARTICIPANTS SO
FAR, SO KEEP SAYING HI.
WE HAVE A GREAT WEBINAR PLANNED
FOR YOU GUYS TODAY ENTITLED WHAT
LURKS WITHIN, WHAT IDENTIFIES
HAZARDS WITHIN YOUR COLLECTION.
A LITTLE SCARY SOUNDING.
ALEX, I'M SURE YOU'LL HAVE SOME
SCHWABING THINGS TO SHARE WITH
US BUT A GREAT ONE PLANNED.
OUR FINAL WEBINAR AS YOU CAN SEE
IS PLANNED FOR THIS THURSDAY,
FEBRUARY 14TH, VALENTINE'S DAY,
WE'LL SEE YOU THERE AT 2:00 IN
THE SAME PLACE YOU ARE RIGHT
NOW.
SINCE WE'RE GETTING CLOSE TO THE
END ON WHAT YOU NEED TO DO TO
T)T(·THIS IS OF COURSE ONLY IF YOU'RE
INTERESTED IN EARNING THAT
CERTIFICATE.
YOU DON'T HAVE TO, YOU CAN JOIN
US WITHOUT EARNING THAT BUT IF
YOU ARE, WE ASK THAT YOU ARE
REGISTERED SO YOU YOU IN OUR
DATABASE.
IF YOU'RE NOT REGISTERED PLEASE
CONTACT US DIRECTLY AT
INFO@HERITAGE.ORG.
WE ASK YOU TURN IN YOUR
ØERMISSION FORM BUT IT LOOKS
LIKE MOST OF YOU ALREADY HAVE SO
WE'RE IN GOOD SHAPE THERE.
WE ASK YOU SUBMIT ALL FOUR
HOMEWORK ASSIGNMENTS BY FEBRUARY
21ST.

IT LOOKS LIKE WHERE PEOPLE ARE KEEPING UP WE HAVE ABOUT 150 TURNED IN FOR THE LAST ONE, A LITTLE OVER 200 FOR THE FIRST ONE AND WE'LL HAVE ANOTHER HOMEWORK ASSIGNMENT FOR LURKZ AND THURSDAY.

SO THE DEADLINE IS FEBRUARY 21ST SO MAKE SURE YOU GET EVERYTHING IN BY THEN.

WELCH GOT THE POWER POINT PRESENTATION, HANDOUTS AND OTHER RESOURCES THAT COME UP DURING THESE WEBINARS.

NOW HOPEFULLY EVERYONE HERE LURKZ HAVE BEEN GETTING OUR E-MAILS.

WE SEND YOU A RECORDING OF THE DAY'S WENT FAR.

IF YOU AREN'T GETTING THEM THAT'S A SIGN YOU MIGHT NOT BE REGISTERED.

WE SEND THE E-MAIL TO EVERYONE WHO IS REGISTERED FOR THE COURSES NY THINGS, EITHER WE'RE ENDING UP IN YOUR SPAM FILTER OR YOU MIGHT NOT BE REGISTERED, SO PLEASE R^r SHOOT US AN E-MAIL.

THAT'S ABOUT IT FOR HOUSEKEEPING.

AS ALWAYS, FEEL FREE TO E-MAIL US IF YOU HAVE ANY QUESTIONS.

AND I'M GOING TO MOVE OVER OUR CHATBOX AND WE'RE GOING TO GO INTO THIS MODERATED CHAT.

AND SO THIS MEANS THAT WE WILL APPROVE YOUR COMMENTS BEFORE THEY GET POSTED TO THE ROOM.

AND IT ALSO MEANS WE CAN ANSWER YOUR QUESTIONS PRIVATELY IF YOU'RE HAVING TECHNICAL ISSUES.

SO WHEN YOU POST SOMETHING, ONCE WE APPROVE IT, YOU'LL SEE YOUR POST TWICE BUT DON'T WORRY, NO ONE ELSE IN THE ROOM IS SEEK IT TWICE.

SO ONLY SEE IT ONCE.

LET ME MOVE THIS OUT OF THE WAY.
ALL RIGHT.

AND I'M GOING TO HAPPENED THINGS
OVER TO ALEX.

ALEX HAS BRAVED SNOW AND OUTAGES
TO BE HERE.

WE ARE GLAD TO HAVE HERE TODAY
IT'S SO APPRECIATED.

I WILL MOVE THIS OVER AND
HAPPENED THINGS OVER TO YOU.

>> YES, INDEED I'M IN RECOVERY
MODE FROM BLIZZARD NEMO, NOT A
PLEASANT EXPERIENCE.

I CAN TELL YOU WITH THREE FIRE
PLACES ON I WENT THROUGH HALF A
CORD OF WOOD AND I USED MY GAS
STOVE BUT I DID NOT HAVE ANY
BURST PIPES.

THANK THE LORD.

SO MY INTERNET JUST CAME ON UP
ABOUT TWO HOURS AGO, SO WE CAN
START GOING FORWARD HERE ON THIS
PARTICULAR, ON THIS THIRD
WEBINAR HERE.

SO LET ME SEE, WHERE WERE WE?
WELL, IN THE FIRST COURSE ON
COLLECTION CARE BASIS, THOSE OF
YOU THAT STARTED FROM THE
BEGINNING YOU LEARNED ABOUT THE
SCENE AND UNSCENE AGENTS THAT
CAN CAUSE COLLECTION DAMAGE
AND DETERIORATION.

YOU LEARNED HOW TEMPERATURE AND
LIGHT LEVELS AND AIR QUALITY AND
ELECTION STORAGE AREAS CAN HELP
OR HURT ARCHIVES AND IN LAST
WEEK'S CLASS WITH ME, YOU
LEARNED ABOUT MAN-MADE AND
NATURAL HAZARDS.

AND HOW THEY CAN AFFECT YOUR
BUILDING AND YOUR COLLECTIONS.

BUT DO YOU KNOW, DO YOU KNOW
WHAT THE RISKY BUSINESS IS ON
YOUR STORAGE SHELVES?

ARE YOU REALLY AWARE OF THE
HAZARDS IN THE COLLECTION AND
THE EFFECT THE HEALTH AND SAFETY

RISKS THEY HAVE TO STAFF AND
COLLECTION USERS.

SO WE'RE GOING TO GO OVER THAT
TODAY.

BECAUSE HISTORIC COLLECTIONS
TEST THE KNOWLEDGE OF COLLECTION
MANAGERS AND REGISTRARS DUE TO
AN AWFUL WIDE VARIETY OF
FUNCTION.

METHODS OF MANUFACTURER AND THE
COMPOSITION OF MATERIALS.

TO BE INFORMED ABOUT ALL FACETS
OF THEIR CARE FROM THEIR HISTORY
TO THE HEALTH AND SAFETY HAZARDS
IS A CHALLENGE EVEN TO THE BEST
OF INSTITUTIONS.

SO FOR TODAY, I WANT EVERYBODY
TO CONSIDER THAT THIS WEBINAR IS
AN IMPORTANT PART OF YOUR
PROFESSIONAL DEVELOPMENT, NO
MATTER WHAT KIND OF COLLECTION
YOU CARE FOR.

AND EVEN IF YOU DON'T HAVE DEEP
COLLECTION HAZARDS THAT YOU'RE
GOING TO SEE GOING FORWARD IN
YOUR INSTITUTION, THEY MAY EXIST
IN YOUR HOME OR YOUR NEIGHBOR'S
HOME OR YOUR LOCAL HISTORICAL
SOCIETY IF YOU'RE CONNECT WITH
YOUR COMMUNITY.

FOR ARCHIVISTS AND LIBRARIANS IN
OUR GROUP, THIS WILL NOTIFY YOU
ABOUT THE ITEMS YOU HAVE ON LOAN
THAT WILL COMPLEMENT YOUR WALL
SPACES.

SO DO THINK OF THEM.

IT ALSO FRANKLY MAKES EVERYBODY
A BETTER INFORMED BUDDY IF A
SISTER INSTITUTION IS IN CRISES
AND NEEDS YOUR HELP.

SO PAY ATTENTION TO THIS WEBINAR
AND ASK IT BACK AND JUST ENJOY
IT.

I THINK YOU MIGHT FIND THAT SOME
OF THE ISSUES ARE SORT OF FUN TO
LOOK AT.

OKAY.

TOPICS OF MUSEUM COLLECTION
ITEMS ARE MADE FROM COMPONENTS
THAT ARE INHERENTLY TOXIC,
DANGEROUS OR HAZARDOUS OR HAS A
POTENTIAL TO BECOME TOXIC,
DANGEROUS OR HAZARDOUS IN TIME.
THIS IS A LIST OF SOME
CATEGORIES WE'RE GOING TO GO
OVER TODAY.

AND ALTHOUGH IT MAY SEEM
FRIGHTENING AND OVERWHELMING,
AND REALLY AN ISSUE THAT'S JUST
EASIER TO IGNORE.

AND INSTITUTION COULD
SUBSTANTIALLY REDUCE ITS RISK TO
STAFF, YOUR VOLUNTEERS AND TO
VISITORS, IF YOU BECOME FAMILIAR
WITH WHAT POTENTIAL HAZARDS
REALLY LURK ON YOUR SHELVES.
AND I DO WANT TO SAY THOUGH THAT
THE FOLLOWING INFORMATION
ALTHOUGH NO WAY EXHAUSTIVE, IT
CAN HELP YOU BEGIN TO ASSESS THE
RISKS AND HAZARDS ASSOCIATED
WITH THE OBJECTS IN YOUR
COLLECTION.

AND I SHOULD ALSO SAY THAT THIS
WEBINAR IS NOT ADDRESSING THE
MATERIALS USED IN BUILDING
CONSTRUCTION.

THIS MAY HAVE TOXIC SUBSTANCES
MAY BE RELEASED.

LIKE FOR EXAMPLE PCB IS -- THEY
CAN BE FOUND IN OLD PAINT, OLD
CEILING TILE, TRANSFORMERS,
FLUORESCENT BALANCEASTS.

I MAY REFERENCE THEM BUT NOT IN
ANY DETAIL.

YOU CAN LEARN MORE ABOUT THESE
IN PAMELA HATCHFIELD'S BOOK,
POLLUTANTS IN THE MUSEUM
ENVIRONMENT AS WELL AS LOTS OF
OTHER SOURCES.

BUT LET'S START OFF, ARE LET'S
START OFF WITH FIRE.

SO MAYBE WHAT DO YOU LOOK FOR IN
YOUR COLLECTIONS TO UNDERSTANDS

WHAT PRESENTS A HAZARD.

SO I'M FIRST GOING TO LOOK AT COLLECTIONS THAT PRESENT FIRE HAZARDS.

A PRIMARY DANGER IS THE FIRE RISK ASSOCIATED WITH DETERIORATING NITRATE NEGATIVES. THESE NEGATIVES WERE EARLY FORMS OF PLASTICS USED FOR VERY LONG PERIOD OF TIME.

AND YOU CAN SEE THEY GO FROM AS EARLY AS 1889, PRETTY MUCH RIGHT THROUGH THE 1950'S.

EVEN THE ACETATES CAN GO EVEN UP TO CURRENT TIME.

THEY CAN REALLY BE HIDDEN MOSTLY IN THE DEPTHS OF YOUR PHOTOGRAPHY COLLECTION.

ALL OF THESE ARE DIFFERENT KINDS OF PLASTICS BUT IT'S THE CELLULOSE PLASTICS, THE CELLULOSE NITRATE AND THE CELLULOSE ACETATE, NOT THE PAUL ELSE TER.

IT'S DUE TO THE CHEMICAL INSTABILITY THAT'S BRENT WHEN STORING FROM DETRYING YOUR NITRATE NEGATIVES.

REMOVE THEM FROM GENERAL STORAGE AREAS AND STORE THEM FOLLOWING STORAGE GUIDELINES IN A DEPARTMENT FREEZER.

A BEST PRACTICE IS TO HAVE THE NITRATE NEGATIVES PROFESSIONALLY REFORMATTED AND DESTROY THE ORIGINAL IN A COLD STORAGE AREA OFF SITE.

NOW BOTH OF THE WEB RE10ERSZ FROM THE NORTHEAST DOCUMENT CONSERVATION CENTER AND THE CONSERVEGRAMS FROM THE NATIONAL PARK SERVICE HAVE REALLY HELPFUL ADVICE THAT DETAILS IDENTIFICATION, HANDLING, PACKING, TRANSPORTATION PROCEDURES.

SO I ENCOURAGE YOU TO LOOK AT

THOSE.

YOU'LL FIND THEM ALL IN YOUR RESOURCE PACKET BUT BE AWARE THAT ALL OF THESE FILM-BASED MATERIALS THAT ARE MADE OF SOME FORM OF CELL YES PLASTIC IS SOME KIND OF COMBUSTION BECAUSE THEY FEEL LIKE I GUESS.

THEY CAN JUST GO OFF SO IT'S VERY IMPORTANT TO GET THEM OUT OF YOUR COLLECTION AND TO IDENTIFY THEM.

NOW THE CELLULOSE AT TATE AND CELLLESS NITRATE WERE EARLY FORMS OF PLARKS THAT WERE GOOD FOR FILM.

BUT THEY WERE ALSO NOT JUST GOOD FOR FILM.

THEY BECAME VERY POPULAR BECAUSE THEY WERE LESS EXPENSIVE MEANS TO IMITATE MORE EXPENSIVE MATERIALS SUCH AS IVORY AND TORTOISE SHELL.

SO THESE COUSINS, WHAT'S HAPPENED IS THESE, THE CELLULOSE ACETATE AND CELLULOSE NITRATE HAVE MORPHED WITH THE INDUSTRIAL REVOLUTION TO CREATE DIFFERENT KINDS OF PLASTIC COUSINS.

THEY ARE NOW PRONE TO SPONTANEOUS COMBUSTION.

THEY ARE PRONE HOWEVER TO CHEMICAL DETERIORATION AND ARE FIRE SENSITIVE.

THEY WILL -- THAT EFFECT COLLECTIONS AROUND THEM NEGATIVELY.

SOME GIVE OFF A NOTABLE VINEGAR SMELL OR SWEET SMELL, BUT OTHERS SIMPLY SHOW VISIBLE SIGNS OF CRACKING, SWEATING AND POWDERING.

SO IDENTIFYING THESE IN YOUR COLLECTION WILL ALLOW YOU TO ISOLATE THEM, PROVIDE A MORE SPECIALIZED ENVIRONMENT, COOLER IS ALWAYS BETTER, AND MONITOR

FOR DEGRADATION.

OVER TIME, THESE EARLY FORMS ALSO EXPANDED TO INCLUDE A WIDER RANGE OF PLASTICS AND WERE INCORPORATED IN EVERY DAY HOUSEHOLD GROUPS.

THE USE OF PLASTIC MATERIALS BECAME REALLY POPULAR AS I'M SURE MOST OF YOU ARE AWARE BY THE TURN OF THE 20TH CENTURY. YOU'LL FIND IT USED IN TOYS, APPLIANCES AND MANY TYPES OF HOUSEHOLD ITEMS.

SO LOOK IN YOUR COLLECTIONS FOR THEM.

TO IDENTIFY ONE OF THESE POSSIBLE EARLY PLASTICS, LOOK FOR WHITE FLUORESCENCE AND I THINK YOU CAN BEGIN TO SEE THEM AROUND THE BEADS AND THE RED, THE BLACK BEADED RED VELVET JACKET.

SEE HOW THOSE RED BEADS ARE A LITTLE WHITER.

THAT'S THE KIND OF POWDERING FLUORESCENCE YOU WILL FIND THAT GIVES YOU AN IDEA THAT THINGS ARE BEGINNING TO DETERIORATE AND FALL APART.

THEY'RE GIVING OFF AN -- WHICH WILL AFFECT THE SURROUNDING MATERIALS.

SO ACTUALLY IN HERE, I DON'T HAVE A SLIDE TO ZOOM IN BUT ACTUALLY IT'S TURNED THE RED VELVET TO A BROWN.

IF YOU DO FIND THEM MAKE SURE YOU HANDLE THEM WITH GLOVES LATEX GLOVES AND THEY REQUIRE SPECIAL CLEANING PROTOCOLS. BEST NOT CLEANED WITH WATER OR SOLVENTS, BEST JUST TO DUST THEM.

YOU'LL FIND THEM IN DOLL, THAT'S WHY I HAVE THE DOLL IMAGE UP THERE.

YOU'LL FIND THEM IN A LOT OF DIFFERENT KINDS OF MATERIALS.

NOT ALL PLASTICS ARE GOING TO BE UNSTABLE BUT THE CELLULOSE COUSIN USUALLY ARE STABLE AND WILL EXHIBIT SIGNS OF INSTABILITY.

NOW ANOTHER CLASS OF FIRE EXCITEMENT THAT YOU MIGHT FIND ARE FIRE GRENADES.

FOR THOSE OF YOU IN HISTORIC WOODEN BUILDING YOU MAY FIND 19TH CENTURY AND EARLY 20TH CENTURY FIRE EXTINGUISHERS CALLED FIRE GRENADES.

MOST WERE MADE AFTER 1870 UNTIL ABOUT 1910.

BUT NOT ALL ARE FILLED WITH CARBON AT THE TIME CLOSER TRACHLORIDE THAT'S HEAVIER HAS NOT AIR THAT SMOTHERED FLAMES.

THERE'S GAS THAT PRODUCES CONTACT WITHIN THE FIRE BUT NOT THE -- IF YOU FIND THEM THESE REQUIRE A SPECIAL HAZMAT REMOVAL PROCESS AND SHOULD BE BROUGHT TO THE ATTENTION OF YOUR FIRE DEPARTMENT.

BECAUSE THEY'RE OFTEN CONSIDERED IMPORTANT ARCHITECTURAL FEATURES, THEY TELL YOU THE STORY OF YOUR HOUSE, YOU WILL NEED TO ADVOCATE THAT THE FIRE DEPARTMENT RETURN THEM EXPENSE THEM RATHER THAN DESTROY THEM OR THEY SHOULD BE STORED IN A FLAMMABLE CABINET.

TIMES WHEN YOU LOOK AT THEM YOU'LL BE ABLE TO SEE THEY'RE EMPTY AND THE LIQUID'S ALREADY EVAPORATED.

SO YOU MAY NOT HAVE A CONCERN BUT BE AWARE THEY COME IN MANY PRETTY COLORS AND MANY DIFFERENT KINDS OF SHAPES AND SIZES.

BUT THEY'RE ALL ABOUT A FOOT TALL OR SO.

THEY CAN LOOK LIKE LIGHTBULBS OR GLASS BOTTLES OR LITTLE GRENADES

YOU SEE IN THAT UPPER CORNER UP THERE.

NOW ANOTHER SORT OF FIRE RISK IS THE RISK OF EXPLOSION IN OBJECTS THAT CONTAIN GUNPOWDER.

BLACK POWDER BECOMES INCREASINGLY UNSTABLE WITH AGE AND SLIGHT JOLTS MAY CAUSE IT TO IGNITE.

YOU MAY FIND IT LOOSE LIKE THE POWDER IN THE BOTTOM OF THIS CAN IN THE IMAGE TO THE RIGHT.

LOOKS LIKE COARSE GROUND BLACK PEPPER.

YOU MAY FIND THEM IN THE COLLECTIONS OF ARMORY, REENACTMENT GROUPS AND GENERAL HISTORIC COLLECTIONS.

HUNTING IS A VERY POPULAR SPORT, AND THIS DEFINITELY IS A PRIME MATERIAL TO REMOVE FROM YOUR COLLECTION.

EVEN TRACES OF IT CAN REMAIN DANGEROUSLY EXPLOSIVE.

IT CAN BE TRIGGERED BY A SHARP PHYSICAL KNOCK AND THE CORRECT BUT UNPREDICTABLE ENVIRONMENTAL CONDITIONS THAT INCREASE THE CHANCE OF STATIC ELECTRICITY SPARKING AN IGNITION.

THE POSITIVE BLACK POWDER COME IN ALL SIZES AND SHAPES.

AND THE HAZARD COMMONLY GOES IN UNRECOGNIZED BECAUSE MUNITIONS USUALLY HIDE UNDER AND BEHIND OTHER COLLECTIONS.

LIKE THESE RIFLES STORED WITH OTHER MISCELLANEOUS COLLECTIONS.

THIS WAS INSIDE THE SILVER CLOSET.

YOU CAN FIND IT IN MANY DIFFERENT PLACES.

NOW AMMUNITION IN THE FORM OF SHELLS AND GRENADES ARE THE MOST RECOGNIZABLE.

SOMETIMES EVEN 19TH CENTURY SILVER WAR CANNONBALLS ARE STILL

ACTIVE.

THEY MAY STILL HAVE A FUSE IN THE HOLE.

REVOLUTIONARY BALLS, CAN -- CANNONBALLS MAY NOT HAVE THAT PROBLEM.

OF THESE VERIFIED AS NOT BEING DEACTIVATED.

AS LONG AS YOU HAVE VERIFIABLE WRITTEN PROOF TO THE CONTRARY, ASSUME ALL FIRE ARMS ARE LOADED AND ALL SHELLS AND MORTARS ARE LIVE.

IF ACTIVATION OF MUNITIONS ARE NECESSARY, PLEASE DON'T ATTEMPT TO DO IT YOURSELF.

ASK FOR HELP FROM YOUR STATE POLICE OR NATIONAL GUARD UNIT TO IDENTIFY IF IT'S LOADED AND TO DEACTIVATE THE CHARGE AND CLEAN THE RESIDUES OUT OF THE BARRELS.

FOR INSTANCE, /MY HOME STATE, NO ONEV-'O CHECKS THE SILVER WAR CANNON ON THE LAWN IN FRONT OF THE STATE HOUSE UNTIL THE 1980'S WHEN IT WAS FOUND A HUNDRED YEARS LATER TO STILL BE LOADED.

THINK OF ALL THOSE CHILDREN THAT SAT ON TOP OF THAT CANNON BARREL FOR ALL THOSE YEARS.

JUST NOBODY KNEW THAT, NOBODY REMEMBERED THAT IT HAD MISFIRED AND NO LONGER WAS A USABLE CANNON.

AND WHEN IT 1/2 CANNON BALL HAD BEEN STUCK INSIDE THE BARREL ALONG WITH THE RESIDUES FROM THE CHARGE.

SO THIS WAS SOMETHING THAT WAS IMPORTANT TO ADDRESS.

WHEN YOU THINK OF MORE FIRES AND EXPLOSIONS, TO IDENTIFY MORE OBSCURE OBJECTS THAT MIGHT RETAIN A CHARGE, THINK OF ALTERNATIVE INDUSTRIES SUCH AS MINING EQUIPMENT, SEARCH AND RESCUE EQUIPMENT, AND EVEN PHOTOGRAPHIC FLASH EQUIPMENT IF YOU MAYBE TELL THE

STORIES OF THE NEWS MEN OR THE NEWSPAPER IN YOUR AREA.
THINK OF THE INDUSTRY IN YOUR AREA THAT MIGHT HAVE USED SOME SORT OF EXPLOSIVE EQUIPMENT THAT YOU MIGHT HAVE EXAMPLES OF IN YOUR COLLECTION.
EACH OF THESE OBJECTS HAS MECHANISM THAT IS MEANT TO HOLD A CHARGE AND COULD POTENTIALLY BE LOADED AND READY TO GO.
SO IF YOU ARE HISTORY BASED INSTITUTION, IT DOES NOT HAVE AN ACTIVE COLLECTING PLAN, MORE OFTEN THAN NOT, THESE WILL LURK IN THE DEPTHS OF STORAGE BECAUSE THEY HAVE NOT BEEN RECOGNIZED FOR WHAT THEY WERE.
COLLECTION STEWARDS TRADITIONALLY ARE REALLY DILIGENT ABOUT NOT REMOVING ANYTHING FROM A COLLECTION AREA. AFTER ALL, COLLECTIONS ARE OUR CHILDREN, RIGHT?
AND BEING VERY MINDFUL, THEY JUST RETURNED THE BITS AND PIECES TO A SHELF LEADING THE DILEMMA TO DISCOVER WHAT THEY REALLY ARE FOR THE NEXT PERSON TO RESOLVE. AND THAT NEXT PERSON COULD BE YOU.
REMEMBER TOO, OLD CANS OF PAINT CAN ALSO BUILD UP PRESSURE AND EXPLODE WHEN HANDLED.
BUT SOME OF THESE ITEMS THOUGH THEY REALLY ARE ODD BALL.
AND I HOPE SOME OF THEM WILL MAKE YOU SMILE.
AS AN EXAMPLE, GOLF BALLS ARE FILLED WITH COMPRESSED AIR, CERTAIN MODELS OF GOLF BALLS ARE FILLED WITH COMPRESSED AIR.
IF A FIRE HAPPENED, THE HEAT WILL CAUSE THE AIR TO PUT INCREASE PRESSURE ON THE DETERIORATING COVERS WHICH THEN POP LIKE POPCORN.

SOMETHING I'M SURE YOUR FIRST RERESPONDERS MAY NEVER HAVE EXPERIENCED BEFORE.

YOU MIGHT REMEMBER THE CHEMISTRY SETS OF YOUR CHILDHOOD.

THESE OFTEN HAD ACID AND EASILY MADE COMBUSTIBLES INCLUDED AS PART OF THE SET.

THAT'S PROBABLY WHY THEY WERE SO FUN, RIGHT.

I MEAN THE THINGS OUR KIDS ARE MISTERING THESE DAYS.

SO IT IS A GOOD PRACTICE TO MAKE A LIST OF POSSIBLE CANDIDATES AND ASK FOR HELP IN IDENTIFYING NEXT STEPS IF YOU AREN'T SURE.

THERE'S NOTHING WRONG WITH THAT.

SO JENNY, SHALL WE BREAK FOR QUESTIONS?

>> WE SHOULD BECAUSE WE HAVE A LOT OF THEM.

>> WE DO.

>> WE DO.

>> OKAY.

SO PEOPLE HAVE IDEAS AS TO WHAT CHALLENGES ARE ALREADY LURKING IN THEIR COLLECTIONS?

OKAY.

>> YES.

SO I'M GOING TO GO AHEAD AND GO BACK TO ONE OF OUR FIRST QUESTIONS DURING YOUR SLIDE ABOUT PLASTICS SUPPORT.

THIS IS FROM JANENE, SHE SAYS I'M ASSUMING THE POLYESTER IN QUESTION IS NOT SIMILAR TO THE ARCHIVAL ENCLOSURE MATERIAL, CORRECT.

>> IT'S SAFETY FILM.

POLYESTER IS WHAT KODAK CALLED SAFETY FILM SO THEY ARE A SIMILAR PLASTIC, YES.

>> OKAY.

>> BUT THEY'RE MORE STABLY MADE.

>> AND THEN KATHY HAD A QUESTION FROM OHIO.

SHE SAYS THESE SLIDES ALSO APPLY

TO THESE SEGMENTS.

>> YES, THEY WILL APPLY TO THESE SEGMENTS.

>> NOW WE HAD SOME QUESTIONS DURING YOUR NITRO CELLULOSE COUSIN SLIDE. AND ROBERT HAS A FEW QUESTIONS. HE SAYS ARE ACETATE-BASED NEGATIVES ALSO COMBUSTIBLE OR IS THIS JUST LIMITED TO NITRATE-BASED FILMS.

>> NO CELLULOSE ACETATE ARE A VERY, THEY ARE NOT SPONTANEOUSLY COMBUSTIBLE BUT THEY WILL BURN VERY QUICKLY.

AND THEY DO DETERIORATE. ÂÛ THEY ARE AN UNSTABLE MATERIAL SO THEY WILL DETERIORATE AND GIVE YOU THAT VINEGAR SYNDROME AND BEGIN TO YELLOW AND CURL AND GIVE YOU ALL SORTS OF SIZE OF DETERIORATION.

SO THEY SHOULD BE REMOVED AND ISOLATED BECAUSE AS THEY OFF GAS THAT VINEGAR, THAT OFF GASSING WILL EFFECT COLLECTIONS NEXT TO IT AND SPEED UP THE DETERIORATION.

>> NOW THERE'S ANOTHER QUESTION WE HAD AND I BELIEVE THE AUDIENCE ANSWERED IT IS THAT VINEGAR SYNDROME, IS IT HAZARDOUS TO HUMANS?

>> IT'S AN IRRITANT IS WHAT IT IS.

AND IT WILL IRRITATE YOUR SKIN AND IT WILL IRRITATE ANY INHALATION.

>> OKAY.

A FOLLOW FROM THE PREVIOUS QUESTION WHAT ABOUT ACETATE-BASED MICRO FILMS.

>> IF IT'S ACETATE -- CELLULOSE ACETATE-BASED MICRO FILM WILL ALSO HAVE THOSE SAME KINDS OF PROBLEMS.

>> OKAY.

AND THEN KATHY HAD A QUESTION

TOO ABOUT 1950 SLIDES.

WOULD THOSE BE POLY, THEN?

IS THAT CORRECT?

>> THEY COULD BE.

THEY DON'T NECESSARILY HAVE TO
BE BUT MOST LIKELY THEY WOULD

I WOULDnI REFERENCE YOU TOlxy THE
NORTHEAST DOCUMENT CONSERVATION
LEAFLET AND THEY HAVE A GUIDE TO
FILM-BASED PHOTOGRAPHIC MATERIAL
ABOUT THE IDENTIFICATION, CARE
AND DUPLICATION.

IT'S ON-LINE AND IT GIVES YOU

SOME YOU REALLY GOOD

IDENTIFICATION HEADERS.

AND WE KNOW THE INFORMATION FROM
KODAK.

WHAT WE DON'T KNOW IS ALL THE
IDENTIFICATION INFORMATION FROM
THE OTHER FILM PRODUCING
COMPANIES.

SO AT LEAST KODAK CAME FORWARD.

AND THEN THERE WERE SOME OTHER
TESTS THAT CAN BE DONE OR I
WOULD SAY CONTACT A CONSERVATOR
WHO SPECIALIZES IN FILM AND
PHOTOGRAPHY AND THEY CAN HELP
WALK YOU THROUGH THESE.

>> OKAY.

LET'S SEE.

ANOTHER QUESTION.

KATHY HAD A FOLLOW UP QUESTION.
SHE SAYS IS IT SAFER TO DIGITIZE
ACETATES ARE SIMPLY STORED THEN.

>> IF YOU STORE THEM IN REALLY
GOOD ENVIRONMENTAL CONDITIONS,
YOU WILL BE ABLE TO PRESERVE
THEM LONGER.

THE ISSUE WITH DIGITIZATION IS
IT'S PUTTING IT INTO A WHOLE
OTHER FORMAT THAT CAN REALLY
ENSURE THAT IT WILL BE
STABILIZED FOR THE FUTURE.

THAT'S A FORMATTING QUESTION,
THOUGH AND I'M NOT A SPECIALIST
IN FORMATTING.

SO I WOULD SUGGEST THAT YOU ASK

A PAPER CONSERVATOR WHO WAS FAMILIAR, MORE FAMILIAR WITH FORMATTING THAN I AM.

I DON'T KNOW HOW YOU ACTUALLY DO THE RISKS THERE.

CERTAINLY IF YOUR ENVIRONMENT IS NOT TERRIBLY USER FRIENDLY, I WOULD SAY DIGITIZATION IS THE WAY TO GO.

>> OKAY.

AND THEN YOU HAD A QUESTION FROM CASEY WHO IS CURIOUS.

HOW DO YOU THINK THE DIFFERENCE BETWEEN ACETATE, POLY AND NITRATES?

>> WELL, IF YOU LOOK AT THAT PRESERVATION LEAFLET, IT GIVES YOU SOME CLUES WHAT TO LOOK FOR. SOME OF IT IS JUST, YOU CAN LOOK AT THE IMAGES.

IN SOME CASES THERE ARE NOTCHES ON THE ACTUAL FILM THAT WILL HELP YOU DATE IT.

THERE ARE ALSO SOME FLOAT TESTS WHERE YOU CAN CUT A PIECE OFF AND THERE'S A PARTICULAR CHEMICAL YOU CAN FLOAT IT IN. AND NITRATES WILL FALL THROUGH THE BOTTOM BECAUSE THEY'RE HEAVIER.

THE POLYESTER USUALLY FLOATS IN THE MIDDLE AND THEN THE ACETATES MAY FLOAT ON THE TOP.

I COULD HAVE THAT REVERSED. IT COULD BE THE ACETATES GO TO THE BOTTOM AND NITRATES GO TO THE TOP.

I ALWAYS HAVE TO LOOK UP THE INSTRUCTIONS.

THERE WERE SOME BURN TESTS TOO THAT CAN BE DONE.

IF YOU HAVE ANY QUESTIONS I'D SAY CONTACT YOUR PHOTOGRAPHIC.

>> THIS IS THE LAST QUESTION ON A TOPIC FROM ROBERT.

HE SAYS SO IF FILM AND PHOTOGRAPHS ARE STORED ALONG

WITH PAPER COLLECTIONS, THEN THEY NEED TO BE REMOVED NOT JUST FOR PRESERVATION PURPOSES BUT BECAUSE OF THE POTENTIAL FIRE HAZARDS.

IS THAT A SAFE ASSUMPTION?

>> IF YOU HAVE ANYTHING THAT HAS CELLULOSE NITRATE OR CELLULOSE ACETATE, FOR A FILM-BASE MATERIAL, IT IS DEFINITELY SAFER TO REMOVE THEM.

>> OKAY.

AND THEN ONE MORE FOLLOW UP QUESTION FROM ROBERT ON VINEGAR SYNDROME, HE SAYS THEY HAD AN ENTIRE AREA OF MICROFILM THAT WAS EXHIBITING VINEGAR SMELLS IN THEIR LIBRARY AND HE'S CURIOUS ON THE IMPACT IT MIGHT HAVE HAD ON STAFF.

WE ALSO HAD ANOTHER QUESTION FROM SOMEONE WHO SAID WHAT ARE SIGNS AND SYMPTOMS THAT YOU MIGHT NOTICE IF THAT WAS AN ISSUE.

>> YOU CAN, I THINK WITH OVER EXPOSURE, IT'S SORT OF LIKE BEING WITH MOLD, YOU BECOME VERY SENSITIZED TO IT AND YOU CAN HAVE COSTS THAT CAN IRRITATE YOUR LUNGS.

AND SO YOU HAVE THE BREATHING, THE DIFFICULTY IN BREATHING ASPECTS TO IT.

AND SOME PEOPLE CAN BECOME QUITE --

>> THERE WAS A COMMENT SHE FOUND OUT THE HARD WAY THAT THESE CAN --

>> YES.

>> I'M SORRY, ADRIENNE.

>> SO WE HAVE SOME QUESTIONS ABOUT FIREARMS AND BLACK POWDER. JANENE IS CURIOUS BULLETS FIRED DECADES AGO SAFE NOW.

>> BULLETS THAT HAVE BEEN FIRED ARE EMPTY OF THEIR CHARGE.

SO YES, THEY ARE SAFE.

>> OKAY.

AND NOW WE HAVE A FEW QUESTIONS FROM YOUR SITE ABOUT ANYTHING THAT MIGHT EXPLODE.

SO LET'S SEE WHEN YOU WERE TALKING ABOUT PARACHUTES, KATHY WAS CURIOUS IF YOU WERE TALKING ABOUT POLY BASE PARACHUTES, NOT SILK ONES.

>> WHAT I'M TALKING ABOUT WAS PARACHUTES IS THE RIPCORDS. WHEN YOU JUMP OUT OF A PLANE AND YOUR PARACHUTE DOESN'T UNFURL AND YOU PULL THE CORD IT'S SUPPOSED TO EXPLODE OUT.

SO THERE IS A LITTLE CHARGE IN PACKET IN YOUR PARACHUTE.

IT'S NOT SO MUCH THE FABRIC BUT THE MECHANISM THAT MAKES THEM ALL TIGHTLY PACKED AND THEN MAKES THEM UNPACKED.

>> OKAY.

AND WE HAVE ANOTHER QUESTION FROM ALAN AND ACTUALLY A FEW OTHER PEOPLE CURIOUS ABOUT OLD MATCHES.

DO THEY DEGRADE AND BECOME NON-DANGEROUS OVER TIME OR WHAT, DO YOU HAVE ANY SUGGESTIONS ON WHAT TO DO WITH MATCHES IN COLLECTIONS.

>> WELL WITH MATCHES IN COLLECTIONS, I WOULD JUST KEEP, TRYING TO GET A MATCH GOING IS IF THERE'S SOME FIRE THAT COMES OR SOME HEAT THAT COMES NEXT TO IT AND THEN IT NEEDS OXYGEN TO BURN.

SO I FEEL THE SAFEST THING TO DO WITH MATCHES IS TO STORE THEM IN A METAL CONTAINER.

AND THAT LIMITS THE AMOUNT OF OXYGEN THAT THEY CAN USE SHOULD THEY IGNITE.

AND IT ALSO LIMITS THEM ON THE OUTSIDE FROM HEAT OR SOMETHING

THAT MIGHT LAND ON TO IT THAT
WOULD CAUSE IT TO BEGIN TO BURN.
>> WE HAVE A FEW MORE QUESTIONS.
WE HAVE ONE FROM GRET AWE WHO
WAS CURIOUS.

THEY HAVE WORLD WAR II CANS OF
FOOD.

SHOULD THEY EMPTY THEM?

>> OH.

WELL, THIS IS ALWAYS A DEBATE.
IT'S ACTUALLY I'LL TALK ABOUT A
LITTLE BIT LATER ON.

I ADVOCATE IN THE VAST MAJORITY
OF CASES THAT THE CANS ARE
EMPTIED.

THE REASON I ADVOCATE FOR THAT
IS THAT IF THE SEALS, THERE'S
USUALLY TIN CANALS THAT HAD A
LEAD SOLDER SEAM TO IT AND IF
THE SEAM, IF THE ACID FROM THE
FOOD BEGINS TO CORRODE THE SEAM
OR IF THE SEAM WASN'T
PARTICULARLY SUPER TIGHT AND A
LITTLE BIT OF OXYGEN, JUST A
LITTLE MICRO MOLECULE GETS IN
THERE, YOU CAN FORM SOME
BOTULISM.

ONCE THE BOTULISM BEGINS TO FORM
IT CREATES SOME PRESSURE AS THAT
PATHOGEN BEGINS TO GROW AND THE
PIECES CAN EXPLODE.

SO IT CANNOT ONLY BE A HEALTH
HAZARD, IT CAN ALSO BE A
PHYSICAL HAZARD.

AND THEM ONCE IT BEGINS TO LEAK,
IT BECOMES ATTRACTIVE TO PESTS.
SO UNLESS THERE'S SOME VERY VERY
STRENUOUS REASON YOU REALLY WANT
TO KEEP THE FOOD THAT'S IN
THERE, I ADVOCATE FOR YOU
EMPTYING THOSE CONTAINERS.

>> OKAY.

THIS MIGHT BE RELATED.

LINDA WAS CURIOUS IN HOW THEY
MIGHT STORE AFTER SHAVE OR
PERFUME IN A COLLECTION.

>> I ... AFTER SHAVE OR PERFUME.

I USUALLY SUGGEST THAT IT BE REMOVED AND THEN YOU HAVE A DIED LIQUID, LIKE A WATER OR AN ALCOHOL THAT GOES INTO THE CONTAINER.-i

THE ONLY REASON, I DON'T THINK, THE ONLY REASON WE HAVE SOME CONCERNS REALLY IS IF THE CONTAINER BREAKS FOR SOME REASON AND THEN THE CONTENTS OF THAT WILL SPILL ON TO SOMETHING AND MAY BE HARD TO REMOVE.

THERE MAY BE CERTAIN OILS OR FRAGRANCES OR COMPONENTS IN THAT AFTER SHAVE OR THAT PERFUME THAT CAN HAVE SOME RESIDUAL EFFECTS ON THE PIECES THAT MAY FLOW ON TO SHOULD THE CONTAINER BREAK.

>> OKAY.

AND I'M GOING TO TAKE ONE MORE QUESTION BEFORE WE MOVE ON TO OUR NEXT SLIDES BECAUSE SOME OF THESE WE MIGHT ADDRESS FURTHER DOWN THE ROAD.

SO THIS NEXT QUESTION COMES FROM LEANNE AND LEANNE WE GOT YOUR E-MAIL.

AND SO HER QUESTION IS ONE OF HER BUILDINGS IS SET UPS A GARAGE INCLUDING UNMARKED CANALS OF LIQUID, OILS, PAINTS, TERM TIN -- SHE'S THE COLLECTIONS MANAGER FOR THE SMALL TRANSPORTATION MUSEUM.

>> SHE'S PROBABLY WALKING INTO THE TERRITORY OF THE FACILITY MAINTENANCE POSITION OR MAYBE IT'S

VOLUNTEERS THAT ARE DOING THIS. THE BEST PRACTICE IS TO USE FLAMMABLE CABINETS SO IF THEY DO EXPLODE THE CABINET WILL CONTAIN IT.

ANOTHER GOOD PRACTICE IS TO LABEL THEM ALL.

IF THEY CAN'T BE LABELED FOR THEM TO DISPOSE OF THEM.

YOU DON'T HAVE TO GO TO YOUR
FIRST RESPONDERS BUT YOU CAN
START WITH THE STAFF THERE THAT
SAYS CAN SOMEBODY PLEASE TELL ME
WHAT THESE ARE BECAUSE WE~
\$v ARENOT REALLY FOLLOWING THE OSHA
OCCUPATIONAL SAFETY AND HEALTH
ADMINISTRATION STANDARDS.
THERE'S ACTUALLY A LEGAL ISSUE
HERE IF PROTOCOL CANNOT BE, ARE
NOT FOLLOWED REALLY CAREFULLY.
THERE IS A REASON WE DO HAVE ALL
THESE SAFETY PROTOCOLS.

>> OKAY.

>> THE FIRST THING TO DO IS GET
THAT FLAMMABLE CABINET.

>> GREAT.

AND THEN CINDY ASKED US TO KIND
OF ADDRESS HOW YOU DISPOSE OF
THESE OBJECTSOR REMOVE THEM AND
I KNOW YOU'LL CATCH THAT TOWARDS
THE ENDS.

THE REST OF THESE QUESTIONS
WE'LL TRY TO GET THEM BEFORE THE
WEBINAR'S OVER BUT I WANT TO
GIVE ALEX PLENTY OF TIME TO GET
THROUGH HER PRESENTATION.

ALEX OVER TO YOU.

>> THANK YOU EVERYBODY FOR ALL
YOUR QUESTIONS AND WE'LL HOLD ON
TO THEM FOR TOWARDS THE END.

HERE WE GO, SOMEBODY ALREADY
ASKED A QUESTION ABOUT THE FOOD.
SO LET ME JUST, I HAVE ONE SLIDE
HERE AND WE'LL JUST GO OVER AND
SEE IF I CAN REITERATE ANY
INFORMATION THAT I'VE ALREADY
COVERED.

BECAUSE AS YOU KNOW, A MORE
OBSCURE MATERIAL ASSOCIATED WITH
HISTORIC COLLECTIONS ESPECIALLY
IN NEW ENGLAND IS WHALE OIL.
WHALE OIL IS SOMETIMES FOUND AS
EXAMPLES OF HISTORIC WRITING
FIXTURES.

WE HAVE SOMEBODY FROM NAN TUCKET
AND MAYBE THEY HAVE WHALE OIL

OVER THERE.

IT WILL BURN IN A HAZY MESSY WAY
BUT WILL ACCUMULATE A GREASY
DEPOSITS ON COLLECTIONS.

AND IT WILL ACTUALLY ONCE THAT
DEPOSIT WILL ADD TO YOUR OWN
HEALTH AND SAFETY PROBLEMS.

SO TO RULES THE SMOKE RISKS
ASSOCIATED WITH THIS MESSY
HAZARD, SUBSTITUTE THE CONTENTS
WITH ANOTHER LOOK ALIKE LIQUID
OR STORE THEM IN FLAMMABLE
CABINETS.

SEE IF YOU REALLY NEED THEM ON
DISPLAY OR WHETHER THERE'S
ANOTHER WAY YOU CAN VISIBLY
SUBSTITUTE IT.

AND THEN WE ALSO FIND IN
HISTORIC SITES PRESERVE FOODS.
IN THESE IMAGES THERE ARE GLASS
JARS WITH DIFFERENT KINDS OF
JAMS AND JELLIES AND MEATS IN
THEM.

AND A CAN OF SYRUP ON THE RIGHT.
IF THERE'S A LEAK IN THE GLASS
CONTAINERS OR THE METAL TIN DUE
TO AGING, THEY CAN EXPLODE FROM
THE BACTERIA GENERATED INSIDE.

OLD UNOPENED CANS THAT HAVE A
LEAKING SOLDER LINE MAY BE
CONTAMINATED WITH BOTCH LIMBS.
THAT BACTERIA MAY COSTS THE CANS
TO EXPLODE DAMAGING OTHER
OBJECTS IN THE COLLECTION.

IT'S NOT SO OBVIOUS A COLLECTION
ITEM BUT CERTAINLY GENERATES A
REALLY MESS, MESSY BOOM AND IT'S
VERY ATTRACTIVE.

SO THESE ITEMS SHOULD BE ON YOUR
FIREMAN'S NOTICE LIST AS
POTENTIAL HAZARDS, AS THEY CAN
EXPLODE AND CAUSE SHRAPNEL.

IT'S ONE OF THE REASONS YOU WANT
TO RULES THE RISK OF HAVING CAN
FOODS IN YOUR COLLECTION.

NOW THESE ON THIS SLIDE, MAY BE
FAR FROM YOUR EXPERIENCE BUT IN

LARGE INDUSTRIAL COLLECTIONS,
PCBs MAY BE FOUND IN
GENERATORS, TRANSFORMERS AND
MANY TYPES OF INDUSTRIAL
EQUIPMENT.

AS THESE OBJECTS DETERIORATE, OR
IF THEY'RE DAMAGED, THE PCBs
CAN LEAK OUT, EXPOSING PEOPLE TO
THIS CANCEROUS HAZARDS.

AND THEN OTHER KINDS OF
MATERIALS THAT I GENERALLY PUT
ON THIS CATEGORY ARE BATTERIES
AND HYDRAULIC AND BRAKE FLUIDS
IN MASTER CYLINDERS.

THEY HAVE CORROSIVE FLUIDS YOU
MAY FIND IN HOME MEDICAL
EQUIPMENT, CARS OR OTHER
INGENIOUS WORKING COLLECTIONS.
LOTS OF ADVENTURES AROUND THE
TURN OF THE CENTURY PULL
TOGETHER ODDS AND ENDS UNTIL YOU
COULD FIND SOME REALLY
INTERESTING SORT OF SCIENTIFIC
AND MEDICAL ELECTRICITY
GENERATING EQUIPMENT IN YOUR
COLLECTION.

IF YOU HAVE ANY BATTERIES, BE
SURE TO DRAIN THEM WHEN SAFELY
FEASIBLE.

IN SOME CASES THE CONNECTOR LINE
NEEDS TO BE PURGED WITH LIVE
PRESSED AIR.

WITH VEHICLES, ATTRITIONAL TRAYS
THAT SCRATCH DRIPS IS ADVISABLE
TO MINIMIZE THE HAZARDOUS CLEAN
UP PROCEDURES WHEN IT COMES TO
HAVING THEM ESPECIALLY IF
THEY'RE WORKING VEHICLES OR YOU
KNOW STORAGE FOR SIX MONTHS AND
THEN SOMEBODY'S GOING TO TAKE
THEM OUT AROUND THE BLOCK.

IT'S ALWAYS A GOOD IDEA TO GIVE
THEM THEIR OWN OIL TRADE TO PARK
A LITTLE.

YOU CAN LEARN MORE ABOUT LARGE
VEHICLES IN THE CONSERVEGRAM
LEAFLET THAT'S LISTED HERE.

IT'S ALSO IN YOUR RESOURCE
PACKET FOR THE WEBINAR.
NOW, OTHER NOT SO COMMONLY NOTED
HEALTH AND SAFETY RISKS.
OUR COLLECTION CONTAINING HUMAN
AND VETERINARY FARM SUIT CULL
SUPPLIES.

IF YOU HAVE THESE MAKE SURE YOU
HANDLE THESE WITH EXTREME
CAUTION.

AS SUCH KINDS OF BOXES AND
COLLECTIONS MAY CONTAIN VIABLE
PATHOGENS OR TOXIC AND/OR
CONTROLLED SUBSTANCES.
THESE FILES ARE USUALLY
UNREADABLE AND THE CONTENTS
UNKNOWN.

WHITE POWDER, MM-MM, COULD LOOK
LIKE A LOT OF DIFFERENT THINGS.
OVER TIME THE INGREDIENTS WILL
HAVE DECOMPOSED OR BECOME HIGHLY
CONCENTRATED.

IF YOU DID NOT KNOW WHAT THE
VIALS HAVE, THEY SHOULD BE
CONSIDERED A POTENTIALLY HARMFUL
SUBSTANCE.

BE AWARE THAT FIRST-AID KITS UP
THROUGH THE 1950'S AND THIS
INCLUDES EVEN GIRL SCOUT KITS
An?1250EU78Z CONTAIN EXPLOSIVE
MATERIAL CALLED -- AWE IDENTIFY
IN THE GAUZE BAND ENGINES.
NOW AS THESE BANDAGES DRY
OUTOVER TIME.

THAT'S WHAT THE ACID IS USED
FOR, IT CAN BECOME UNSTABLED.
YOU NEED TO GET YOUR FIRE
DEPARTMENT, YOUR HAZMAT TEAM TO
COME IN AND TAKE CARE OF IT.
IT'S NOT GOING TO BLOW OUT YOUR
BUILDING BUT IT IS DEFINITELY
SOMETHING YOU DON'T WANT TO
HANDLE.

IT'S USUALLY LOWEST LEVEL OF
HAZMAT, YOU NEED TO EVACUATE THE
BUILDING OR GIVE A 75 FOOT
RADIUS.

THEY DO NEED TO BE REMOVED FROM YOUR COLLECTIONS.

IF YOU HAVE ANY GAUZE BANDAGES, JUST BE AWARE AND JUST HANDLE THEM REALLY CAREFULLY AND CALL YOUR HAZMAT TEAM.

ANY OF THESE MATERIALS YOUR COLLECTIONS MANAGEMENT GUIDELINE SHOULD CONTAIN THE PROTOCOL AND THE LOCAL SUPPORT RESOURCES FOR DISPOSING OF THESE AND FOR CLEANING OUT THE JARS, IF YOU HAPPEN TO HAVE MEDICINE JARS. OFTEN YOUR UNIVERSITY CHEMISTRY DEPARTMENT CAN HELP YOU IDENTIFY ANY SOLUTIONS IN MEDICINE JARS. AND YOU CAN ALSO START WITH YOUR PHARMACIST.

AND ALSO YOUR POLICE AND YOUR FBI CAN HELP YOU WITH SOME CHEMICAL ANALYSIS IF YOU'RE REALLY CURIOUS.

NOW COLLECTION THAT ARE RELATED TO MEDICAL DEVICES FOR SURGERY OR IN HISTORIC COLLECTIONS FOR BLOOD LETTING ARE CONSIDERED TO HAVE BIOLOGICAL RISKS DUE TO PATHOGENS THAT MAY REMAIN ON THEM.

THIS ALSO APPLIES TO THE SHARP EDGES OF SPEARS, SWORDS AND ARROWS.

A BEST PRACTICE IS TO HANDLE THEM WITH GLOVES AND TO WIPE THE EXPOSED AREAS WITH ALCOHOL.

AND BE SURE THAT YOUR COLLECTION MANAGEMENT RECORDS INDICATE WHEN AND HOW THEY WERE CLEAN.

SO THAT SAVES THE NEXT PERSON WHO LOOKS AT THIS FROM KNOWING IF THEY NEED TO CALL SOMEBODY IN.

I PUT UP HERE A-i MOUSE AND RESIDUAL OF A MOUSE BECAUSE ANOTHER BIOLOGICAL RISK IS THAT OF HANTA VIRUS IS SPREAD TO HUMANS BY RODENTS THAT HAVE A

SITUATION SIMILAR TO INFLUENZA.
IT'S CARRIED BY RODENTS,
ESPECIALLY DEER MICE AND IT'S
FOUND FROM THE NEST AND
DROPPINGS.

IT WON'T MAKE THE ANIMALS SICK
BUT WILL MAKE YOU SICK IF YOU
COME IN CONTACT WITH THIS
CONTAMINATED DUST CLEANING YOUR
STORAGE AREAS THAT HAVE NOT BEEN
FOR A LONG TIME.

THAT'S WHY I WANTED TO BRING IT
TO YOUR ATTENTION.

SO SIGNS OF MICE NESTS AND
RODENT NESTS IS WHAT YOU LOOK
FOR.

IF YOU WANT INFORMATION ON HOW
TO OTHERWISE INFECT YOU CAN
REFERENCE THE CONSERVEGRAM I
HAVE LISTED HERE.

YOU USE BLEACH, THEY DO ADVISE
THAT YOU ACTUALLY PUT ON GLOVES
AND A MASK THEY ACTUALLY SUGGEST
THAT YOU GET INTO ONE OF THOSE
DISPOSAL HAZMAT SUITS AND YOU'LL
BE USING LOTS OF BLEACH.

NOW ON TO ANOTHER INTERESTING
COLLECTION YOU MAY FIND ONE WAY
OR ANOTHER.

THIS SHOULD BE CAREFULLY
MANAGED.

THIS KIND OF COLLECTION IS TO BE
CAREFULLY MANAGED ARE THOSE FOR
PRESERVED WET SPECIMENS.

AND I WILL SAY IT'S SURPRISING
HOW MANY COLLECTIONS CONTAIN A
SAMPLING OF THIS TYPE OF
COLLECTION.

EVEN IF IT IS NOT PART OF YOUR
COLLECTING FOCUS.

YOU DON'T NEED TO BE A MEDICAL
MUSEUM, YOU DON'T NEED TO BE A
NATURAL SCIENCE CENTER OR
RESEARCH CENTER TO FIND THESE.
SPECIMEN HOUSED IN

FORMALDEHYDE-OR ETHANOL IS A
FIRE FLET AS WELL AS A HEALTHY

AND SAFETY RISK.

THE SEALS OF FLUID OF PRESERVED SPECIMEN SHOULD BE REGULARLY CHECKED AS EVAPORATION IS AN ONGOING CONCERN BOTH FOR THE PRESERVATION OF THE SPECIMEN AND FOR MONITORING AND VENTILATING THE ROOM.

IF YOUR COLLECTION IS SMALL, STORING IT INSIDE A FLAMMABLE CABINET DESIGNED FOR SOLVENTS IS ADVISABLE.

IF YOU HAVE A LARGE NUMBER AND YOU REALLY HAVE A COLLECTION OF THESE YOU PROBABLY ALREADY KNOW THAT A VENTILATED ROOM DESIGNED TO RULES THE RISKS OF SPARKS AND FIRE IS A BEST PRACTICE.

THESE ROOMS USUALLY HAVE OR USUALLY SELF VENTILATING.

THEY'RE ON THEIR OWN DUCT WORK.

THEY HAVE ELECTRICAL OUT LETS THAT ARE AT LEAST THREE FEET HIGH BECAUSE THESE SOLVENTS WILL ACTUALLY FALL TO THE FLOOR, BE HEAVIER THAN AIR AND HAVING AN EMERGENCY PLAN IF YOU HAVE THESE, IS REALLY IMPORTANT BECAUSE THESE ARE HIGHLY FLAMMABLE.

OF COURSE FOR THOSE OF YOU WHO WONDER WHY YOU ONLY HAVE A FEW BOTTLES YOU DO, LOOK AT THE IMPORTANCE OF THESE PIECES TO YOUR MISSION, YOUR COLLECTING PLAN AND YOUR PROGRAMMING.

IF YOU FIND THEM TO BE EXTRANEIOUS, THINK ABOUT TAKING ACTION AND REMOVE THEM FROM YOUR COLLECTION.

IT'S THE SAFEST AND EASIEST THING TO DO.

ANOTHER KIND OF HAZARD YOU MIGHT FIND.

TYPES OF INHERENTLY TOXIC SUBSTANCES ARE USED IN ETHNOGRAPHIC MATERIALS.

THERE ARE A NUMBER OF CULTURES AROUND THE WORLD THAT PURPOSELY USE PLANT PRODUCTS TO PRODUCE MEDICINE, POISON OR RESTRICTED SUBSTANCES.

POISONOUS SEEDS MAY BE USED AS DECORATIONS ON CLOTHING AND JEWELRY.

THESE WERE USED ON RATTLES AND TOURIST ITEMS.

SOMETIMES COLORED WITH RED LEAD AND WHITE LEAD, SIN BAR AND OTHER TOXIC MATERIALS AND PIGMENTS.

THAT'S ANOTHER REASON TO BE CAREFUL ABOUT ETHNOGRAPHIC AND ETHNO BOTANICAL HAZARDS.

SMEARS AND -- SPEARS AND KNIVES MAY BE COATED WITH THESE.

THINK WE HAVE PATHOGENS FROM FLOODING OR CONTAMINATED BY SEWAGE.

IF YOU DON'T KNOW WHAT IT IS OR YOU CAN'T READ THEM IN THIS ENGINE, THE BEST PRACTICE IS TO ASSUME THEY'RE HAZARDOUS AND MANAGE THEM ACCORDINGLY.

IN CASES SUCH AS THESE PEARL VINE BEADS ON THE RIGHT, THE ATTRACTIVE COLOR HIDES HOW TOXIC THEY REALLY ARE.

THE BEAD LINE AND THE CASTER BEAN PRODUCE THE EXTREMELY DANGEROUS POWDER LYSOSOMES THAT GIVE IT A THREAT.

ALL ETHNO BOTANICAL HAZARDS AND ALL HAZARDS NEED TO BE VISIBLY IDENTIFIED AS HAZARD OCCUPIES AND HANDLING POLICY WITH GLOVES IS A GOOD PRACTICE.

AND AS I SAID, THIS IS ACTUALLY A REALLY FOUND PRACTICE FOR ANY HAZARDOUS ITEM IN YOUR COLLECTION.

BUT THREE TEARED LABELING SYSTEM IS ADVISED TO ALERT USERS TO THESE HAZARDS.

THIS INCLUDES THE DATABASE, ON THE OBJECT ITSELF AND ON THE STORAGE CASE.

SO THIS IS, THIS PARTICULAR LABELING SYSTEM WAS PUT TOGETHER BY SOCIETY FOR THE PRESERVATION OF NATURAL HISTORY COLLECTIONS. BUT I THINK IT'S APPLICABLE TO ALL OF THEM.

I CLEARLY NEED TO BREAK FOR SOMETHING TO DRINK.

JENNY, I WILL BE GLAD TO TAKE SOME QUESTIONS TOO.

>> OF COURSE.

WE DID HAVE A GREAT QUESTION JUST A SECOND AGO FROM CHRISTY. ALEX, THE CAN WE GET A COPY OF THIS THREE-TIERED LABELING SYSTEM FOR THE WEBSITE?

>> I THINK IT IS STILL AVAILABLE.

I WILL LOOK INTO IT.

IT WAS ON-LINE AND IT WAS FREE, AND I WILL CHECK IT OUT.

WE MAY BE ABLE TO GET IT THROUGH EITHER THE UNIVERSITY OF MINNESOTA WHO HOSTED IT.

I HAVE TO SEE IF THEY'RE STILL HOSTING IT.

BUT YOU CAN CERTAINLY USE THESE IMAGES HERE AND MAKE UP YOUR OWN GRAPHICS JUST LIKE THIS.

>> OKAY.

AND WE'LL LOOK INTO THAT.

WE'LL POST IT ON THE COURSE WEB PAGE.

SO ALEX I HAVE A QUESTION THAT COMES TO US VIA E-MAIL AND THIS IS A GOOD OPPORTUNITY TO ASK.

YOU HAVE MENTIONED IN DEALING WITH HAZARDOUS MATERIALS, YOU MIGHT CALL UPON PEOPLE THAT WOULD BE YOUR FIRST RESPONDERS IN THE EVENT OF THE DISASTER.

AND OUR QUESTION WAS ABOUT INSTITUTIONAL FEAR OF BRINGING IN FIRST RESPONDERS.

OF COURSE THE FEAR IS HAVING
THEM COME IN AND HAVING THEM SAY
DOOR'S CLOSED, YOU NEED TO FIX
THIS AND THERE'S.

BUDGET TO FIX IT.

CAN YOU KIND OF YOU KNOW LABEL
THE BENEFITS AND TOUCH ON THAT
SUBJECT A LITTLE.

>> WELL, IT'S A REALLY HARD NUT
TO CRACK.

ONE OF THE THINGS THAT I SUGGEST
IS THAT YOU JUST HAVE A
ONE-ON-ONE OFF SITE WITH ONE OF
YOUR FIRST RESPONDERS.

AND JUST GIVE THEM THE LOW DOWN.
THEY MAY KNOW THAT YOU HAVE
DIFFICULTIES.

BUT IF YOU MAKE AN EFFORT TO SAY
WE'D REALLY LIKE TO BEGIN TO
ADDRESS THIS, WE AREN'T QUITE
SURE WHAT OUR PRIORITIES ARE, WE
HAVE, WE'D LIKE TO ADDRESS THIS
AND SEE IF ONE OF THEM WILL COME
OUT OF UNION FORM.

SEE IF ONE OF THE FIRST
RESPONDERS WOULD BE WILLING TO
COME IN HIS CIVIL CITIZEN
CLOTHES AND NOT IN HIS OFFICIAL
FIREMEN GEAR.

THAT WAY IT GIVES HIM A LITTLE
MORE LEEWAY TO GIVE YOU SOME
ADVICE IN A LITTLE MORE USER
FRIENDLY WAY AND HELP YOU
DEVELOP A PLAN.

THAT'S WHY I SUGGEST IF YOU HAVE
A PLANNING TEAM, ONE OF MY TIPS
IS TRY TO GET ONE OF YOUR FIRST
RESPONDERS AS A PRIVATE CITIZEN
TO COME HELP YOU.

ALSO, YOU COULD BRING IT TO YOUR
ATTENTION IF YOU'RE COMFORTABLE
WITH YOUR ADMINISTRATION BY
ALERTING THEM THAT BECAUSE
YOU'RE PAID STAFF, BY LAW YOU
ARE COVERED BY THE OCCUPATIONAL
SAFETY AND HEALTH ADMINISTRATION
OSHA RULES.

AND IF YOU ASK THE STATE OSHA FOR, NOT THE FEDERAL OSHA BOARD BUT YOUR STATE OSHA GROUP, IF YOU INVITE THEM AND YOU HAVE TO INVITE THEM TO COME IN, THEY WILL COME IN AND THEY WILL SHOW YOU WHAT NEEDS TO BE DONE AND THEY WILL WORK WITH YOU.

YOU HAVE TO MAKE A COMMITMENT TO WORK TOWARDS COMPLIANCE.

YOU CAN'T JUST HAVE THEM COME IN AND WORK TOWARDS COMPLIANCE.

THAT DOESN'T MEAN YOU NEED THE BEST SPRINKLER SYSTEM YOU MAY NEED TO DO SOME SIMPLE THING RIGHT OFF THE BAT.

YOU HAVE THIS LIST AND NO FINES. NO FINES WILL BE GIVEN TO YOU IF YOU INVITE YOUR LOCAL BOARD IN. WHEREAS IF YOUR FEDERAL BOARD COMES IN TO DON'T INSPECTION AND THIS USUALLY IS AS A RESULT OF SOME OF DISGRUNTLED EMPLOYEE, THEY WILL NOT ONLY CLOSE DOWN YOUR INSTITUTION, THEY WILL PUT A LARGE SIGN ON THE INSTITUTIONS TO COMPLY.

THERE ARE A COUPLE WAYS TO BEGIN.

ANOTHER WAY TO BEGIN IS TO COME TO THE NEXT WEBINAR ON AND I HAVE SOME MITIGATION TIPS ON SOME WAYS YOU CAN BEGIN TO DO YOUR OWN SELF ASSESSMENT AND BEGIN TO MAKE SOME STEPS GOING FORWARD.

THAT'S A LONG WINDED ANSWER THERE.

SORRY ABOUT THAT.

>> CINDY WEIGHED IN AND SAID WITH HER EXPERIENCE WITH FIRST RESPONDERS THEY WILL OFTEN GIVE YOU 30 DAYS TO CORRECT ANY ISSUE.

SO ALSO GOOD TO KEEP IN MIND.

>> YOUR FIRST RESPONDERS THEY WANT TO WORK WITH YOU.

WE IN RHODE ISLAND WITH OUR

STATION FLIER, EVERYBODY IN
RHODE ISLAND NOW HAS TO HAVE
FIRE SUPPRESSION SYSTEMS.
AND IT WAS VERY COSTLY.
AND THE CHURCHES, ALL THE PUBLIC
SPACES WENT OVER IT.
BUT THE FIRE DEPARTMENT, THE
FIRST RESPONDERS ARE REALLY
WORKING FOR YOU AND THEY REALLY
WANT YOU TO DO BETTER.
AND MORE OFTEN THAN NOT THEY
PROVIDE QUITE A BIT OF LEEWAY TO
HELP YOU MOVE ALONG.
YOU JUST HAVE TO BE WILLING TO
MOVE FORWARD AND NOT JUST SAY NO.
IT IS A TWO WAY STREET.

>> ALLvItSO WE HAD A QUESTION FROM CHRISY
WHEN WE WERE GOING OVER THE
PHARMACEUTICAL COLLECTIONS AND
SHE SAID THAT'S MY ENTIRE
COLLECTION, OUR MEDICAL
COLLECTION.

SHE'S CURIOUS, ARE THERE ANY
GOOD RESOURCES FOR EVALUATING
MEDICAL COLLECTIONS.

I'M NOT SURE IF ONE OF THESE IS
INCLUDED IN THE HANDOUT, ALEX?

>> TRY YOUR UNIVERSITY CHEMISTRY
DEPARTMENT.

YOU CAN TRY YOUR STATE POLICE
THEY CAN HELP YOU.

I FIND THE UNIVERSITY CHEMISTRY
DEPARTMENT IS VERY HELPER.

VERY USER FRIENDLY TO DO THAT.
YOUR PHARMACIST CAN ALSO GIVE
YOU SOME SUGGESTIONS.

>> AND THEN ROBERT ALSO HAD A
QUESTION.

I THINK THAT ALSO HELPS ANSWER
HIS IS IF SOMEONE FOUND SAY A
GLASS FILED THAT'S BELIEVED TO
BE PART OF A MEDICAL COLLECTION,
HOW DOES ONE GO ABOUT THE TASK
OF GETTING IT ANALYZED.

>> YOU MEAN IF THERE'S A
SUBSTANCE IN IT.

WELL, IF YOU CAN, SOMETIMES

THERE ARE LABELS ON IT THAT GIVE YOU SOME HINTS.

SO IF YOU TAKE IT OR ASK THE UNIVERSITY DEPARTMENT OR THE STATE POLICE OR THE FBI.

AS LONG AS YOU TELL THEM LOOK THESE ARE HISTORICAL COLLECTIONS.

SO PLEASE DON'T.

WE REALLY NEED THE FILE TO COME BACK TO US AND WE REALLY NEED THE LABEL TO COME BACK TO US. THE CONTENTS MAY NOT ARE NOT NECESSARILY THAT IMPORTANT TO US.

BUT WE DON'T WANT YOU TO BREAK UP THE CONTAINER WHICH IS A PRIMARY RESOURCE.

IF YOU EDUCATE THEM ON THAT LEVEL QUITE OFTEN THEY LOOK AT IT AS A HISTORY DETECTIVE'S OPPORTUNITY AND HAD HE CAN GET QUITE EXCITED ABOUT IT.

IT'S LIKE HAVING YOUR DENTIST X-RAY SOMETHING FOR YOU.

AND YOU'RE LIKE IT'S BETTER THAN A TOOTH.

THINK ABOUT YOUR RESOURCES AND THEY SHOULD BE ABLE TO HELP YOU.

>> WE HAD ANOTHER QUESTION.

I THOUGHT THIS WAS SUCH A GOOD QUESTION, JANENE IN NEW YORK HAD A QUESTION ABOUT HOW TO MAINTAIN EQUIPMENT -- IN CONTACT WITH POTENTIALLY HAZARDOUS OR TOXIC SUBSTANCE DURING THE NORMAL CLEANING PROCESS.

AND I KNOW SOMEONE POSTED A RESOURCE FROM THE CANADIAN CONSERVATION INSTITUTE BUT ALEX DO YOU HAVE ANY SUGGESTIONS?

>> I'M NOT SURE I UNDERSTAND THE QUESTION.

>> IF YOU ARE DOING REGULAR CLEANING OF A COLLECTION AND THAT COLLECTION IS POTENTIALLY HAZARDOUS, ARE THERE SPECIAL

STEPS THAT YOU SHOULD TAKE IN
CLEANING YOUR CLEANING
MATERIALS.

TO SAY A VACUUM.

>> FOR THE VACUUM ITSELF.

I WAS THINKING YOU HAD A VACUUM,
YOU HAD SOME COMPRESSOR THAT WAS
AN HISTORICAL ITEM, I'M SORRY.

I'M GOING TO GO OVER THE WHOLE
HANDLING AND PROTOCOL FOR WHAT
YOU DO WITH I DON'T REMEMBER OWN
SAFETY ISSUES.

IF YOU HAVE A VACUUM YOU WANT TO
USE A HIPPA VACUUM OR A
PARTICULAR VACUUM.

AFTER YOU'VE DONE YOUR CLEANING
ON THAT AREA YOU WOULD DISPOSE
OF THAT FILTER AND PUT IN A NEW
ONE.

ALSO YOUR PERSONAL PROTECTIVE
EQUIPMENT YOU WEAR YOUR GLOVES
AND YOUR MASK.

I HOPE THAT DPINS TO ADDRESS THE
QUESTION.

>> WE HAVE ANOTHER QUESTION WHEN
WE WERE DISCUSSING PATHOGENS
FROM SUZANNE.

IS THERE A HINT OF VIRUS
EVERYWHERE IN THE UNITED STATES.

>> IT ACTUALLY IS BUT IT'S MORE
DOMINANT IN THE DRYER REGIONS
BECAUSE THE DUST IS MORE APT TO
BECOME AIRBORNE BUT IT IS
EVERYWHERE.

>> WE HAVE A QUESTION THAT SAYS
WE HAVE A SMALL BASKET WITH A
LID THAT HAS VIALS THAT ARE FULL
OVER SPICES AND TOPPED WITH A
CORK.

I ASSUME YOU'RE NOT EXACTLY SURE
WHAT THE SPICES ARE.

SHOULD THAT BE TREATED A HAZMAT
SITUATION?

>> IT KEY PENS IF -- DEENDS
PENS IF YOU KNOW WHAT THE
CONTENTSDZ REALLY ARE.

IT'S IMPORTANT TO FIND OUT WHAT

THEY ARE.

IF SOMEONE CAN HELP YOU IDENTIFY THAT AND YOU CAN PUT IT IN YOUR COLLECTION MANAGEMENT SO YOU KNOW THAT THAT'S WHAT IT IS, THAT WOULD BE REALLY HELPFUL.

IF YOU THINK THAT YOU KNOW WHAT THE SPICES ARE IN THERE BUT THEY HAVEN'T BEEN CONFIRMED YOU CAN EMPTY OUT THE SPICES IN THERE SO YOU HAVE A KNOWN SPICES SAY YOU HAVE CURRY OR OREGANO AND THEN YOU CAN MARK IN YOUR COLLECTION MANAGEMENT DATABASE THIS SPICE WAS PUT IN HERE OR THESE HERBS WERE PUT IN HERE AND THEY ARE AT THIS STATE AND THEY WERE KNOWN.

AND THEN YOU CAN SEAL THAT CORK.

>> AND THEN WE HAD ANOTHER QUESTION FROM MICHAEL IN GEORGIA AND I'M NOT SURE I'M GOING TO DO IT JUST AS HE JUST SAYS WHAT ARE ANTHRAX SPORES IN LEATHER BOOK BINDINGS.

>> WELL I THINK YOU'D PROBABLY KNOW RIGHT AWAY IF YOU HAD THAT. USUALLY THE ANTHRAX COMES FROM UNPROCESSED LEATHER.

USUALLY THIS TIME IN THE 21ST CENTURY YOU WILL FIND THEM FROM UNPROCESSED DRUM HEADS OR LEATHER THAT COMES FROM AFRICA. IT'S VERY RARE.

>> I'M HOLDING ON TO A FEW QUESTIONS.

WE HAVE QUESTIONS ABOUT CORN BREAD AND WINE BUT I'M GOING TO HOLD ON TO THOSE TO THE END UNTIL WE GET THROUGH ALEX'S PRESENTATION.

I WILL ASK THEM I PROMISE SO ALEX FEEL FREE TO MOVE ON.

>> ALL RIGHT.

LET'S SEE WHERE WE GO FROM HERE. I THINK NOW WE'RE GOING TO MOVE ON TO GEOLOGY.

SO OF THE 3600 DIFFERENT MINERAL

TYPES, ONLY A SMALL SUBSET POSE A POTENTIAL HEALTH HAZARD. MOST MINERALS ARE ON THE WHOLE SAFE.

HOWEVER, YOU SHOULD BE AWARE OF THE PROBLEM THAT DO EXIST AS THERE ARE ABOUT 200 TYPES OF MINERALS KNOWN OR SUSPECTED TO BE POISONOUS OR CANCER CAUSING. IT IS IMPORTANT TO KNOW WHICH MINERALS ARE PRESENT IN THE COLLECTIONS IN THEIR CHEMICAL COMPOSITIONS IF AT ALL FEASIBLE. THIS ALLOWS YOU TO IDENTIFY THOSE THAT MAY POSE A POTENTIAL HEALTH HAZARD, AND THAT REQUIRES SPECIAL PRECAUTIONS FOR STORAGE AND HANDLING.

PROPER IDENTIFICATION IS THEREFORE THE FIRST STEP. EXAMPLES INCLUDE SPECIMENS THAT CONTAIN ARSENIC, ASBESTOS, MERCURY AND THOSE THAT ARE RADIOACTIVE.

SOME FOSSILS CAN ALSO BE A SOURCE OF RADON WHICH IS PRODUCED BY THE NATURAL BREAK DOWN OF URANIUM.

SOME PEOPLE LIKE IN MY HOUSE WE ACTUALLY HAVE A RADON METER THAT GOES NEXT TO MY SMOKE DETECTOR BECAUSE I HAVE AN OPEN BASEMENT.

SOME MINERAL SPECIMEN ARE HAZARDOUS BECAUSE THEY HAVE SHARP EDGES, CRUMBLE EASILY. SKIN CONTACT CAN CAUSE IRRITATION AND DUST CAN ALSO BE AN INHALATION PROBLEM.

PERHAPS YOU KNOW CLAY AND QUARTZ

DUST IS FINE AND IS FOUND IN THE ART DEPARTMENTS AT THE UNIVERSITY.

THESE ARE RECOGNIZED AS HUMAN CARCINOGENS AND NO SAFE LEVELS ARE ACCEPTABLE AND SOME MINERALS ARE RADIOACTIVE.

THE MOST TOXIC HOWEVER NULL INTO THE CATEGORY OF THE HEAVY METALS AND THESE ARE ARSENIC, LEAD, MERCURY AND -- NOW IF YOU DON'T HAVE INDIVIDUAL SAMPLES OF MINERAL SPECIMENS AS PART OF YOUR COLLECTION, YOU CAN STILL FILED EXPOSURE THROUGH YOUR HISTORIC COLLECTION.

LET'S LOOK AT SOME EXAMPLES.

A RANGE OF COLLECTIONS CAN CONTAIN MERCURY DUE TO THE PROCESS BY WHICH THE ITEM WAS MANUFACTURED.

MERCURY IS REALLY AN ACUTELY TOXIC SUBSTANCE, AND MERCURY READILY ENTERS THE BLOOD STREAM WHEN INHALED.

AS EARLY AS 1713, THE ILL EFFECTS OF MERCURY VAPOR POISONING ON PROFESSIONALS INCLUDING MIRROR MAKERS AND HAT MAKERS WERE WELL-KNOWN.

YOU MAY BE REALLY FAMILIAR WITH THE PHRASE Madder than a Hatter. THAT'S BECAUSE IN THE HAT MAKING INDUSTRY WHEN THE BEAVER HATS AND IT WAS ALL FELTED, IT WENT INTO A MERCURY NITRATE SOLUTION AND PEOPLE WERE WORKING WITH UNPROTECTED HANDS.

AND THIS THEN CREATED NERVE DAMAGE WHICH IS WHY THEY BECAME KNOWN AS Madder than a Hatter. THEY INCLUDE BAROMETERS AND THERMOMETERS AND THOSE OF YOU THAT ARE PROBABLY OLDER THAN WERE BORN BEFORE 1980, MIGHT REMEMBER PLAYING WITH THE SILVER BALL THERMOMETERS AS A CHILD WHEN THEY BROKE.

YOU WILL FIND THEM IN -- IF ANYONE HAS A NAUTICAL COLLECTION AND LIGHTHOUSE LENSES.

HISTORIC MIRRORS HAVE BEEN FILLED WITH MERCURY-FILLED AMALGAM.

IT'S INHERENTLY UNSTABLE
RESULTING IN LIQUID MERCURY
BEADING.

IT WILL BEAD UP IN THE BOTTOM
EDGE OF THE MIRROR FRAME BETWEEN
THE MIRROR GLASS AND THE BACKING
BOARD AND THE DUST COVER.

AN EXAMPLE OF BEADED MERCURY
FROM A MIRROR IS THE IMAGE ON
THE LOWER RIGHT.

SO YOU HAVE THAT PIECE THAT'S
THE MERCURY AMALGAM THAT LOOKS
LIKE A PIECE OF PAPER.

BUT THEN THE BEADS ON IT IS
WHERE THE MERCURY IS BLEED OUT
AND IS NOW FREE FROM THAT
AMALGAM.

NOW THE DUST OR DEBRIS THAT
COMES IN CONTACT WITH THAT
LIQUID MERCURY MUST BE TREATED
AS MERCURY WASTE.

SO THERE'S SPECIAL POWDERS THAT
YOU DUST OVER IT WHEN YOU FIND
MERCURY AND THEN YOU CAN JUST
SWEEP IT UP OR VACUUM IT UP AND
YOU DISPOSE OF ALL THE PRODUCTS
INCLUDING YOUR VACUUM BAG AND
YOUR VACUUM FILTER AND LABEL IT
ON THE OUTSIDE.

AND THEN IT GOES INTO YOUR
SPECIAL, YOU MAY HAVE SPECIAL
COLLECTION DAYS WITHIN YOUR
COMMUNITY.

AND YOU CAN TAKE THOSE FOR THOSE
SPECIAL COLLECTION DAYS.

OTHER HOLDOVER SOURCES OF
MERCURY INCLUDE BLOOD PRESSURE
MONITORS, MEDICAL INSTRUMENTS.
YOU MAY FIND DEFUNCTED CHEMISTRY
SETS.

IF YOU KEEP THEM IN THE CASE,
THEY'RE FINE.

PERSON WHO COLLECT ANTIQUE HATS
OR MILNER SUPPLIES, FOR EXAMPLE,
CAN ALSO BE EXPOSED TO RESIDUAL
MERCURY IN THE FELT.

CURATORS OF MUSEUM-BASED COST TO

TOO MANY COLLECTORS HAVEy~Mf/¶Vw TO TAKE
REAL SERIOUSLY.

LIGHT SWITCHES WITH CONTAIN
MARKET REAR USED AS A BALLAST TO
KEEP THE SWISHZ IN A DESIRED ON
OR OFF POSITION.

AND A MERCURY SPECIMEN KNOWN AS
SIN BAR WAS USED BY THE CHINESE
COMMUNITY AS A PIGMENT FOR
SPECIAL PURPOSES AS WELL AS
JEWELRY AND CARVED CONTAINERS.

ANY OF YOU WITH HISTORIC SITES
MAY FIND THESE EXAMPLES AND
PERSON EFFECTS OR IN YOUR
DECORATIVE ACCESSORIES.

CHECK YOUR COLLECTION FOR ANY OF
THESE AND TAKE PRECAUTION IN
STORAGE AND HANDLING.

THEY ARE SIMPLE PRECAUTIONS AND
PROTECTIVE PRECAUTIONS.

I GO OVER THEM TOWARDS THE END
OF THE PRESENTATION, I JUST
WANTED TO GET THROUGH ALL OF
THESE CATEGORIES.

NOW ASBESTOS IS ANOTHER ARTICLE
USED IN GAS FIRED FIRE PLACES AS
WELL AS IN OLDER HOUSEHOLD
PRODUCTS SUCH AS STOVES, FIRE
PROVE, THE EARLY HOUSES, 1960'S
HOUSES, THE KITCHEN, JUST BE
AWARE WE MAY HAVE ASBESTOS IN
SOME OF THOSE PRODUCTS.

-ALL OF THOSE

ASBESTOS-INSULATING MATERIALS
AROUND OUR PIPES HAD TO BE
REMOVED FROM SO MANY OF OUR
BUILDINGS.

NOW SOMETIMES IT IS FOUND IN
SPECIALTY COLLECTION MATERIALS
THEMSELVES AS IN THE PAINTED
THEATRE CURTAINS WE SEE ON THE
RIGHT.

THEATRE CURTAINS WERE COMMONLY
COATED WITH ASBESTOS AS A FIRE
RETARDANT IN A LARGE PUBLIC
SPACE.

BECAUSE THESE ITEMS ARE MOST

COMMONLY FOUND IN LOCAL THEATRES, THEY ARE NOT CONSIDERED PART OF THE MUSEUM COLLECTION.

AND FOR THOSE OF YOU IN COMMUNITIES WITH THEM, THEY MAY NEED TO HAVE A SPECIAL DECEMBER PENSATION FROM THE FIRE MARSHALLS TO STAY ON SITE.

SO THINK HEAVY METALS. COLLECTION MADE OF LEAD AND ZINC ARE LESS THAN GREEN FRIENDLY. THEY CONTAIN TOXICITY LEVELS THAT REQUIRE PRECAUTIONS FROM HANDLING AND STORAGE.

THE LIST IS BROAD AND INCLUDES COLLECTIONS MADE FROM POTTERY TO BUILDING MATERIALS AND METAL-WORKING SUPPLIES.

WEIGHTED SILKS MAY CONTAIN ART ANYTHING AND LEAD ADDED TO THE SILK DURING THE MANUFACTURING PROCESS AND THUS THEY COMPOSE THE SERIOUS HEALTH HAZARD.

DO NOT HANDLE SUCH ITEMS WITHOUT EITHER YOUR GLOVES.

WE HAVE A CARTRIDGE CALLED HIPPA SHOULD ALSO BE WORN AT AIRBORNE DUST CONTAINING ARSENIC OR LEAD CAN CAUSE RESPIRATORY CANCERS WHEN INHALED.

OLD HOUSE PAINTS AND OLD ARTIST PAINTS ARE ALSO A RISK AS THE HEAVY METALS THAT CREATED THE SATURATED COLORS WE ENJOYED WERE NOT REMOVED FROM PAINT UNTIL THE LATE 1980'S.

I WILL MAKE THE ASSUMPTION YOU WILL NOT EAT THESE BUT BE AWARE THEY HAVE DISPOSAL CONCERNS AND THE HEAVY METALS CAN BE ABSORBED THROUGH YOUR SKIN AND THE DUST THAT YOU INHALE.

YOU MAY BE MORE AWARE OF PRESERVING FLUID FOR TAX DUMBERY AND WHAT'S BEEN RUBBED OVER THEIR SURFACES OVER HISTORY.

THEY CONTAIN A COMBINATION OF HEAVY METAL OF ARSENIC AND MERCURIC CHLORIDE WHICH IS HAZARDOUS TO ANYONE'S HEALTH AND SAFETY EITHER WHEN THEY ARE HANDLED OR WHEN YOU BREATHE THE DUST OR YOU CAN ABSORB THEM WITH JUST BY HAND LINGER -- HANDLING THEM THROUGH YOUR SKIN.

THERE'S A REASON MANY OF THESE ANIMALS REMOVED WELL RESERVED. WHATEVER PESTS MIGHT BE TASTY AND FOUND IN EARLY DEMISE IS SPRINKLED ALL OVER THEM.

SO LABELING, BAGGING AND HANDLING PROTOCOLS ALWAYS USING GLOVES ARE IMPORTANT FOR THE STORAGE AND HANDLING AND EXHIBITION OF ALL OF THESE COLLECTIONS.

NOW PESTICIDES ARE NOT RESTRICTED TO NATURAL HISTORY COLLECTIONS.

CULTURE COLLECTIONS FROM AROUND THE WORLD MADE FROM FURS AND FIRST HAVE CONTAMINATION.

WE NOW KNOW THESE WELL INFORMED EFFORTS KEEP THEM SAFE FROM DAMAGE DUE TO RODENTS AND OTHER PESTS HAVE LONG TERM HEALTH AND SAFETY CONCERNS.

THE BEST PRACTICE AGAIN IS TO CONSIDER UNDOCUMENTED COLLECTIONS MADE FROM FURS, FEATHERS AND SKIN, THAT THEY WILL HAVE A SPECIAL MANAGEMENT NEED.

IDENTIFY THEM AS POTENTIAL RISKS WITH TAGS AND MANDATE A MANAGED SYSTEM OF CARE WITH GLOVES AND SOMETIMES EVEN A MASK.

WE'LL GO OVER THESE AT THE END OF THE WEBINAR.

NOW THE HISTORICAL USE OF PESTICIDES ARE NOTABLE ALBEIT WELL INTENDED MAN MADE HAZARD COMING BACK TO BITE YOU.

OVER 150 HAVE BEEN USED IN THE PAST BUT ARE NOW OUTLAWED. THEY WERE EFFECTIVE BECAUSE OF THE POTENCY AND THE COLLECTIONS MAY BE CONTAMINATED WITH THOSE RESIDUES.

IF YOU HAVE ANY KNOWLEDGE, ANY HISTORICAL KNOWLEDGE OF ARSENIC OR MERCURIC CHLORIDE IN THE COLLECTION PRECAUTION NEEDS TO BE TAKEN IN HANDLING.

ITEMS NEED TO BE TAPPED AND BAGGED AND THE CASES AND SHELVES VACUUMED WITH THAT HIPPA AND FILTER AND THEN THOROUGHLY WASHED.

AFTER VACUUMING THE FILTER IN THE VACUUM NEEDS TO BE DISPOSED OF.

NOW, PARTICULARLY HELPFUL RESOURCE IS THIS PUBLICATION OLD POISONS NEW PROBLEMS.

IF YOU WISH FURTHER HISTORICAL AND TECHNICAL INFORMATION. THIS IS A GOOD RESOURCE TO LET YOU KNOW MORE ABOUT WHERE TO LOOK FOR THESE THINGS AND HOW TO STILL USE THE COLLECTIONS BUT HOW TO PROTECT YOURSELF AND VISITORS FROM ANY POTENTIAL RISK THEY MIGHT STILL HAVE.

NOW FOR THOSE OF YOU WHO MAY HAVE FOSSILS OR PETRIFIED WOOD AND BONE, BE AWARE THAT THEY TOO CAN BE RADIOACTIVE.

RADON CAN ALSO BE FOUND IN MINERALS AND IN GEOLOGIC, THE GAS IS A NATURALLY OCCURRING RADIOACTIVE GAS THAT IS INVISIBLE AND ODORLESS.

IT FORMS FROM THE RADIOACTIVE DECAY OF SMALL AMOUNTS OF URANIUM, NATURALLY PRESENT IN ROCKS AND SOILS.

ALL OF THESE ITEMS NEED TO BE CLEARLY LABELED AND PUT INTO SELF CONTAINED STORAGE BOXES FOR

HEALTH AND SAFETY OF ALL
HANDLERS.

STORAGE CASES NEED TO BE OPENED
AND LEFT IN AIR FOR 15 MINUTES
BEFORE OBJECTS ARE RETRIEVED FOR
STUDY.

EVEN THOUGH THESE SPECIMEN HAVE
A VERY LOW LEVEL OF
RADIOACTIVITY AND ARE SAFE TO
KEEP OBSERVED IN HANDLING AND
STORAGE PROTOCOLS, THE SAFETY
PROCEDURE, THE AIRING OF THE
CASES WILL DISSIPATE ANY BUILD
UP OF RADIOACTIVE LEVEL THAT MAY
BE A HEALTH AND SAFETY RISK.
NOW THERE ARE LARGE NUMBER OF
RADIOACTIVE MINERALS.

BUT MOST OF THESE ARE REQUIRE
AND UNLIKELY TO BE ENCOUNTERED
IN MOST MUSEUM COLLECTIONS.

YOU CAN FINE THESE ITEMS
ANYWHERE, HOWEVER, SO THOSE OF
YOU WHO ARE IN NON-MUSEUM
ENVIRONMENTS, PAY ATTENTION.
LOOK AT THESE SPARKLING BITS
HERE.

THESE SPARKLING BITS WERE IN A
BOX MARKED URANIUM AND AT THE
HOWARD H. BAKER, JR. CENTER FOR
PUBLIC POLICY RAISED THEIR
EYEBROWS WHEN THEY FOUND IT IN
THE MOST UNLIKELIEST OF PLACES.
THE COLLECTION OF THE LATE U.S.
SENATOR, HIS PAPERS AND
MEMORABILIA.

THEY THOUGHT IT WAS A JOKER GIFT
AND MORE LIKELY GLASS BUT IT WAS
LABELED AS A CHRISTMAS PRESENT.
IT WAS ULTIMATELY DETERMINED
THAT THE MATERIAL WAS NATURALLY
OCCURRING URANIUM WHICH IS
SLIGHTLY RADIOACTIVE BUT NOT
DANGEROUSLY SO.

BUT IT GOES TO SHOW THAT SPECIAL
NEEDS COLLECTIONS CAN BE FOUND
ANYWHERE.

SO EVERYONE BEWARE.

AND THE WAY THESE WERE DETECTED IS THAT THE ARCHIVISTS BURIED A GEIGER COUNTER FROM THE SCIENCE DEPARTMENT OF A LOCAL UNIVERSITY AND THEY COULD READ THE LEVEL. NOW ARE ANY OF YOU OLD ENOUGH TO REMEMBER GOING TO THE SHOE STORE AND HAVING YOUR FEET X-RAYED TO DETERMINE WHAT SHOES MIGHT FIT BEST?

I REMEMBER THIS IN THE LATE 1950'S.

WITH THE DISCOVERY OF RADIATION BY MARIA CURIE, THE WORLD THOUGHT RADIATION WAS A PANACEA. INVENTORS TOOK HOLD USING THIS UNREGULATED TECHNOLOGY.

ALTHOUGH WE NOW KNOW TO BE MUCH MORE CAUTIOUS WITH RADIATION YOU MAY FIND HISTORY, MEDICAL AND MILITARY COLLECTIONS TUCKED IN YOUR SHELVES.

AFTER 1998 SOME OBJECTS WERE PAINTED WITH A MIXTURE CONTAINING RADIUM TO MAKE THEM GLOW IN THE DARK.

ALTHOUGH MOST NO LONGER GLOW, THEY ARE STILL RADIOACTIVE.

SUCH ITEMS INCLUDE CLOCKS, WAWRCHTIONZ COMPASSES, INSTRUMENT PANELS, DOORKNOBS, RELIGIOUS STATIARIES AND I LOVE THIS, CHAMBER POT ROOMS.

REMEMBER ANYTHING WITH RAD OR RADI IN THE TITLE.

NOW HERE IN THIS IMAGE HERE IS A WATER DISPENSER MADE WITH CERAMIC INFUSED WITH URANIUM ORE.

YOU KEPT IT IN YOUR ICE BOX, YOU TAKER DAILY DRINKS OF REFRESHING WATER TO MAKE SURE YOU'RE IN TIP TOP SHAPE.

IF ANY OF THESE CANDIDATES ARE DETECTED, YOUR STORAGE SHOULD INCLUDE A WELL LABELED LEAD-LINED BOX OR A CLOSET TO

CONTAIN THESE ITEMS.

AND THEN HERE'S ANOTHER EXAMPLE
OF AN ITEM FROM AN AIRPLANE
MUSEUM.

THE RED COVERED ITEM AT THE END
OF THE AISLE IS A LOW EMISSION
RADIOACTIVE TRAJECTORY.

THEY'VE LABELED IT WITH A BRIGHT
COLOR, IN THEIR DATABASE AND
IT'S BEEN APPROVED JUST TO BE
STORED AS IT IS.

SOME COLLECTIONS HAVE HIGHER
LEVEL RADIATION DEVICES.

THEY MAY HAVE A LEVEL OF RAID
INFORMATION THAT NEEDS SPECIAL
HANDLING OR REGULATORY
PROCEDURE.

YOU WILL NEED A PERMIT TO KEEP
COLLECTIONS WITH RADIATION
EMISSIONS.

IF THEY EXCEED A DETECTABLE
LEVEL.

THE NUCLEAR REGULATORY
COMMISSION AND AND THE STATE
REGULATION FOR HANDLING AND
STORAGE, YOU CAN SEEK ADVICE
FROM THEM.

BUT ITEMS THAT EXCEED NOTED
LEVEL MUST BE REMOVED FROM THE
SITES AND GIVEN TO THE
REGULATORY COMMISSION.

SO DO REACH OUT TO THEM IF YOU
THINK YOU MIGHT HAVE A PROBLEM
OR MIGHT HAVE SOMETHING LIKE
THAT IN YOUR COLLECTION.

THIS IS ESPECIALLY IF YOU'RE A
MILITARY INSTITUTION OR
INSTITUTION THAT HAS LOSS OF --
TO IT.

I PROMISE YOU THAT I WOULD WRAP
UP WITH SOME CONTROL EXPOSURE
HINTS HERE.

SO WHEN YOU FIND A COLLECTION
ITEM MADE OF HAZARDSOUS
MATERIALS, THESE ARE THE KROAT
CALL TO FOLLOW.

CONTROLLING YOUR EXPOSURE IS THE

RECOMMENDED PRACTICE AND THE ULTIMATE GOAL YOU WERE SEEKING. THE FIRST STEP IS TO INVENTORY AND ASSESS THE CONDITIONS. SEEK ADVICE AS YOU NEED HELP TO ANY OF THESE AGENCIES WE'VE VENTURED TO HELP YOU THE DETERMINE OR EVEN IF YOU HAVE A HAZARD.

THE SECOND STEP IS TO EMPLOY A CLEAR AND OBVIOUSLY LABELING PROTOCOL TO IDENTIFY HAZARDOUS DIRECTIONS, DOCUMENT THE INFORMATION IN THE COLLECTION DATABASE, THAT'S JUST ONE STEP. USE A CLEAR LABELING ON THE OBJECT, THAT'S THE SECOND STEP. AND ANOTHER ONE ON THE SHELVING, THAT'S THE THIRD STEP.

THEN YOU MUST EDUCATE EVERYBODY ON THE SAFE HANDLING PROCEDURES. KEEP YOUR STAFF AND VOLUNTEERS SAFE TOO.

PRACTICING GOOD HOUSEKEEPING WILL KEEP LEVELS OF CONTAMINATING DUST AT A MINIMUM. PRACTICE GOOD PERSONAL HYGIENE WHICH MEANS WASH YOUR HANDS AND FACE AFTER THESE ITEMS HAVE BEEN HANDLED.

AND BEFORE YOU HANDLE THEM, WEAR APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT, INCLUDING YOUR GLOVES, A MASK AND A COTTON WORK COAT.

WEARING A LAB COAT IS GOOD PRACTICE NO MATTER WHAT YOU'RE HANDLING AS VERY FEW OF OUR COLLECTION DON'T MAKE US A LITTLE BIT DUSTY AND GRIMY ANYWAY. THIS HAS THE ADDED BENEFIT KEEPING NOT ONLY OUR CLOTHES CLEAN BUT IT'S ALSO VERY SIMPLE TO WASH.

IT REMINDS ME FRANKLY OF THE COVERS ACCOUNTANTS USED IN THE 19TH AND 20TH CENTURY.

YOU MAINTAIN THE MSDS SHEETS.
THESE ARE MATERIAL SAFETY DATA
SHEETS AND TO KEEP THEM ON FILE.
BECAUSE OF OSHA, EMPLOYERS MUST
COMMUNICATE THE HEALTH AND
SAFETY INFORMATION TO EMPLOYEES
EXPOSED TO HAZARDOUS BY POSTING WARNINGMSDS (V LABELS.

HAVING THE MATERIALS SAFETY DATA
SHEETS MSDS SHEETS AND PROVIDE
ANNUAL TRAINING ON THE HEALTH
AND SAFETY INFORMATION.

SO IF YOU, THOSE ARE THE GOOD
HANDLING AND STORAGE PROTOCOLS.
IF YOU DO WANT TO DISPOSE OF
THEM, MAKE SURE YOU DISPOSE OF
THEM PROPERLY.

YOU CAN IN SOME CASES YOU CAN
TAKE THEM TO THE SPECIAL
COLLECTION DAYS IN THE
COMMUNITY.

AND OTHER CASES YOU'LL HAVE TO
GIVE THEM TO A HAZMAT TEAM OR A
HAZMAT AGENCY IN YOUR AREA OR TO
THE REGULATORY COMMUNICATION.
IT WILL DEPEND ON WHAT YOUR NEED
IS.

BUT MOST OF ALL, DON'T HESITATE
TO ASK FOR ADVICE, AND MOST OF
ALL, CONTINUE TO SEEK YOUR OWN
PROFESSIONAL DEVELOPMENT AND
TRAINING TO RAISE YOUR OWN LEVEL
OF UNDERSTANDING OF WHAT HAZARDS
MIGHT LURK IN YOUR COLLECTIONS.
SO WE'VE COME TO THE END OF THE
WEBINAR TODAY.

IN SUMMARY, LET ME SAY THAT THE
MISSION OF MANY OF OUR VIEWERS
TODAY INCLUDES THE MANDATE TO
COLLECT AND PRESERVE ARTIFACTS.
HOWEVER, SOME OF THE OBJECTS IN
THE ARTIFACTS ARE BOUND, WE ARE
BOUND TO PRESERVE AND TO PROTECT
HARM, HAVE THEMSELVES FROM THE
POTENTIAL IF NOT HANDLED
PROPERLY TO HARM US.

BEING AWARE OF WHICH ONES ARE IN
YOUR COLLECTION IS A BEST

PRACTICE.

BUT ABOVE ALL, DON'T OVERLOOK
THE IMPORTANCE OF PROTECTING
YOURSELF.

IN 1987, THE OCCUPATIONAL SAFETY
AND HEALTH ADMINISTRATION
REQUIRED THAT AN EMPLOYERS OF
NON-FACTURING MACHINING SECTORS
AND THAT'S WHERE WE FALL IN,
ESTABLISHED A PROGRAM TO INFORM
EMPLOYEES ABOUT THE HAZARDOUS
MATERIALS ASSOCIATED WITH THEIR
JOBS AND TRAIN THEM IN THE SAFE
USE OF MATERIALS.

SO YOU CAN BRING THAT TO THE
ATTENTION OF YOUR ADMINISTRATOR
IF YOU WANT TO SEE THE
DISCUSSION.

SO HOW ABOUT QUESTIONS ABOUT
TODAY'S WEBINAR.

I SEE WE'RE RUNNING DOWN TO THE
END OF THE WIRE HERE, I'M SORRY.
>> WE'RE.

SO WE HAVE A TON OF QUESTIONS.
LET ME GO OVER THE HOMEWORK
ASSIGNMENT HERE.

THIS IS OUR HOMEWORK ASSIGNMENT
THREE WHICH WILL ALSO BE ON THE
WEBSITE.

I'M ALSO GOING TO TAKE OUR GROUP
LOG IN RIGHT NOW.

SO IF YOU LOGGED IN BY YOURSELF,
YOU ENTERED YOUR FIRST NAME AND
LAST NAME, WE HAVE YOU IN
ATTENDANCE AND TAKEN CARE OF.

IF YOU'RE WATCHING WITH SOMEBODY
ELSE AND YOU'RE EARNING A
CERTIFICATE, GO AHEAD AND HAVE
YOUR GROUP LEADER ENTER IN ALL
YOUR NAMES HERE.

I DO WANT TO MENTION QUICKLY
WE'VE NOTICED A LOT OF PEOPLE
WHO ARE WATCHING IN GROUPS ARE
NOT ACTUALLY REGISTERED SO
YOU'VE NOT GONE THROUGH THE
ON-LINE PROCESS OF REGISTERING
WHICH ISN'T A PROBLEM IF YOU

DON'T WANT A CERTIFICATE.
IF YOU DO PLEASE CONTACT US.
A ALEX, LET ME GET TO SOME OF
THESE QUESTIONS.
WE HAD A QUESTION WHEN WE ARE
GOING GENEALOGY FROM ANITA WHO
IS CURIOUS.

I'M NOT SURE, I'M SO SORRY IF
THIS WAS ABOUT THE ASBESTOS OR
THE OTHER THING YOU TALKED
ABOUT.

SHE SAID I WAS TOLD THAT THEY
ARE NATURALLY RADIOACTIVE AND
ARE NOT A THREAT IF THEY HAVE
NOT BEEN PROCESSED.

IS THIS TRUE?

>> ASBESTOS?

>> NO, I'M NOT SURE IN REGARDS
TO ASBESTOS OR THE OTHER MERCURY
THAT YOU WERE DISCUSSING.

>> MERCURY IS NOT RADIOACTIVE
BUT IT IS A HAZARD FOR HANDLING.
SO IT NEEDS TO BE HANDLED WITH
GLOVES IF YOU HAPPEN TO HAVE IT.
IF YOU DO HAVE LOOSE MERCURY
BEADS THAT YOU'RE TRYING TO
CLEAN UP, THEN THERE IS A
MERCURY HAZMAT SPILL KIT THAT IS
BASICALLY A SPECIAL KIND OF
POWDER THAT CHEMICALLY KEY LATES
AND ATTACHES ITSELF TO THE
MERCURY AND THEN YOU CAN JUST
VACUUM UP THE POWDER AND YOU
CLEANED YOUR SPACE THAT WAY.
THEN YOU HAVE TO DISPOSE OF THE
VACUUM BAG AND YOUR GLOVES AND
EVERYTHING IN ITS OWN PLASTIC
BAG AND LABEL IT AND THEN GIVE
IT TO YOUR SPECIAL COLLECTION
GROUP.

>> OKAY.

>> I DON'T KNOW IF THAT ANSWERS
THE QUESTION.

>> SPEAKING OF MERCURY, THOUGH,
ANITA HAD ANOTHER QUESTION.
SHE IS CURIOUS HOW YOU WOULD
KEEP MERCURY SO IT'S SAFE BUT

VISIBLE IN AN EXHIBIT.

AND SHE SAID SHE MEANT THE
ACTUAL MERCURY.

>> AS LONG AS THE BEAKER OR THE
THURSDAY -- THERMOMETER WAS
BROKEN OR CRACK I WOULD NOT
REMOVE IT FROM ITS CONTAINER.
IF IT'S IN A SEALED CON TAINER
AND YOU KNOW IT'S THERE, I WOULD
LABEL IT IN YOUR COLLECTION
MANAGEMENT DATE BASE.

WE HAVE MERCURY HERE SO THIS
NEEDS TO BE HANDLED CAREFULLY.
YOU MIGHT MOOT -- PUT SOME SORT
OF TAG ON THE BACK OR BOTTOM,
WHEREVER YOU PUT YOUR ACCESSION
NUMBER FOR INSTANCE.

JUST WHEN SOMEBODY PICKSATE UP
THEY ARE ALERTED OH THERE'S A
HAZARDOUS MATERIAL THAT'S PART
OF THIS PIECE OF EQUIPMENT.

>> OKAY.

LET'S SEE.

WE HAD ANOTHER QUESTION ABOUT
MERCURY.

AND SOME OF THESE MIGHT BE A
LITTLE SPECIFIC ALEX BUT I'M
GOING TO THROW THEM OUT THERE TO
YOU.

HOW FAR BACK IN TIME WAS MERCURY
USED IN MIRRORS.

SO WHAT'S THE TIME FRAME WHEN IT
STARTED AND WHEN WE STOPPED?

>> WELL THE FIRST RECORDED USE
WAS IN THE EARLY 1700'S.

>> I'M GLAD I ASKED BECAUSE YOU
KNEW IT.

>> WELL IT'S AROUND, I THINK
IT'S AROUND 1713.

I KNOW IT'S BEEN RECORDED.

IT COULD HAVE BEEN BEFORE THAT
BUT THE HISTORICAL TIN MERCURY
AMALGAMS GO BACK TO THE 18TH
CEPT TREE.

>> I WANT TO INTERRUPT FOR A
SECOND IF YOU CAN'T SPAY PAST
3:30 WE COMPLETELY UNDERSTAND

BUT WE'LL TRY TO GET THROUGH
SOME OF THESE QUESTIONS IF YOU
ARE ABLE TO HANG ON.
WE MAY LOSE OUR CLOSED
CAPTIONERS PAST 3:30.
AND OUR BACK UP SOUND BUT WE
WILL KEEP MOVING AHEAD.
THE LAST WEB NURSE OF THIS COURT
IS FEBRUARY 14TH AT 2:00 PM.
KEEP YOUR QUESTIONS COMING AND
WE WILL TRY TO GET TO THEM.
SO LET ME MOVE BACK.
WE HAVE ANOTHER MERCURY
QUESTION.
ANOTHER KIND OF SPECIFIC
QUESTION, IF YOU KNOW, KATHRYN
IS CURIOUS, WHEN MERCURY STOPPED
BEING USED FOR HATS.
>> I DON'T KNOW WHEN THE PROCESS
ACTUALLY STOPPED.
I CAN'T HELP YOU.
I WOULD IMAGINE IN THE BEGINNING
OF THE 20TH CENTURY BUT I DO NOT
KNOW FOR SURE.
STARTED WHEN WE RAN OUT OF
BEADERS.
>> ANITA FOLLOWED UP WITH US ON
OUR EARLIER QUESTION ABOUT
GEOLOGICAL SPECIMENS.
SHE SAYS SHE WAS SPEAKING ABOUT
URANIUM MINERAL AND WHETHER OR
NOT THEY ARE RADIOACTIVE
UNPROCESSED.
>> I WOULD REFER TO A GEOLOGIST
BUT MY UNDERSTANDING IS THAT ANY
URANIUM OR URANIUM DERIVATIVE
HAS SOME LEVEL OF RADIOACTIVITY.
THEY ARE VERY LOW.
YOU'RE NOT GOING TO GLOW IN THE
DARK WHEN YOU'VE TOUCHED THEM
ONCE BUT THERE ARE CERTAIN
PROTOCOLS FOR ANY OF THOSE
MINERALS THAT ARE IMPORTANT FOR
STORAGE.
BECAUSE IF YOU CONTAIN THEM,
WHICH IS WHAT YOU'RE SUPPOSED TO
DO, OF COURSE YOUR CONTAINER, IF

IT'S A METAL SPECIMEN CASE FOR
INSTANCE, THAT RADIOACTIVITY,
THAT LEVEL, WILL BEGIN TO
CONCENTRATE IF IT'S, THE LONGER
IT SITS INSIDE THAT CLOSED CASE.
SO I BELIEVE ALL URANIUM HAVE
SOME LEVEL OF RADIOACTIVITY.
AND THEY DO DECAY OVER TIME
BECAUSE THEY ALL HAVE HALF TIME.
>> LET'S SEE.

WE HAD A QUESTION OUT OF GOOD.
ARE THERE ANY DANGER IN ANTIQUE
MAGNIFYING GLASSES WHEN IT COMES
TO MERCURY.

AN -- I'D HAVE TO SEE THE OBJECT
ITSELF TO ADVISE ANY FURTHER.
IT'S 3:30 NOW SO WE COMPLETELY
UNDERSTAND IF YOU CAN'T HANG ON
WITH US SO WE'LL KEEP GOING
THROUGH THESE QUESTIONS. Û-