Developing an Abandoned Vehicle Cleanup Program for Tribal Governments





The Problem of Abandoned Vehicles on Tribal Lands

Abandoned vehicles pose an environmental and human health threat for many tribes. This document is a guide for tribal governments on how to establish and maintain an abandoned vehicle collection program.

To initiate a successful program, the tribal government should work closely with the community and provide information on the environmental, health, and other hazards associated with abandoned vehicles.



Abandoned vehicle on tribal land

Environmental and Health Concerns Regarding Abandoned Vehicles

- Abandoned vehicles are often utilized to store garbage and other refuse, which may attract pests and become disease vector breeding grounds.
- Abandoned vehicles are a visual blight and can be detrimental to local businesses.
- Abandoned vehicles can be targets of arson and vandalism.
- Fluids like gasoline/diesel fuel, oil, transmission fluid, and power steering and brake fluids can leak, polluting soil, ground water and surface water.
- Vehicles contain other materials that may harm the environment and should be removed and disposed of as municipal waste or hazardous waste before the cars are crushed (such as lead-acid batteries and mercury switches).

The table on the following page shows the vehicle components, potential contaminants, and the proper disposal for each. Check with your state and local government for any additional regulations regarding hazardous waste processing, transport, and disposal.

Table showing Vehicle components, potential contaminants, and proper disposal.

Vehicle Components	Potential Contaminant	Proper Disposal		
Switches and lamps	Mercury	Licensed metal recycler that reclaims mercury		
Fluids such as gear oil, power steering fluid, transmission oil, brake fluid, used oil	Hydrocarbons, Polyethylene glycol, solvents, polychlorinated biphenyl compounds (PCBs)	Used oil or fluids recycler		
Filters	Fuel, transmission oil, used oil	Recycle through scrap metal recycler or landfill		
Lead-acid batteries	Lead, battery acid	Battery recycler		
Wheel weights	Lead	Lead recycler		
Battery cables	Lead	Lead recycler		
Air conditioning units	Chlorofluorocarbons, other refrigerants	Certified technicians or certified reclamation facilities		
Undeployed Air bags	Sodium azide	Properly deploy prior to shredding and scrap with the vehicle Note: Anyone who detonates air bags should receive training in order to do so safely. Another option would be a tribal rule that mandates air bag detonation and removal to be completed by properly trained contractors.		
Brake shoes and clutches	Asbestos	Certified landfill		
Waste tires	Polynuclear aromatic hydrocarbons	Waste-tire processor		
Closed Refrigerated Tractor trailers	Interior is a nitrogen-rich, oxygen depleted atmosphere	Ventilate all tractor trailers prior to entering		

Options for Collecting and Disposing of Abandoned Vehicles on Tribal Lands

The tribe can contract for the abandoned vehicle collection and disposal, or perform all the collection and processing. When a tribal agency contracts to have the cars crushed and recycled, it is best to try to contract as far down the recycling chain as possible – with the actual metals purchaser. Working directly with the metals purchaser often results in receiving the best prices for the metals; furthermore, the metals purchaser may already have working relationships with vehicle transporters, crushers, and disposal services. The tribe can include other services in the contract, based upon the tribe's needs, including:

- Vehicle transportation
- Fluid removal
- Hazardous materials removal (e.g., mercury switches)
- Vehicle crushing
- Vehicle shredding
- Metal recycling

NOTE: Tribes may want to ensure that the chosen contractor complies with Occupational Safety and Health Administration (OSHA) regulations.

Common options for vehicle collection and disposal include:

Option 1: Tribe collects and processes vehicles and sells scrap metal to a metal scrapping company.

Pros	Cons
• May get a higher price for the scrap metal if no services, such as crushing the cars or removing fluids, are provided by the metal recycler.	 Requires trained and experienced tribal staff to process the vehicles. Tribe is responsible for proper disposal of all fluids and hazardous materials.

Option 2: Tribe collects and transports all vehicles and contracts with a metal recycler for crushing, hazardous waste removal, and recycling.

Pros	Cons
 Metals recycler is responsible for all fluid removed and disposal. Less trained and/or experienced tribal staff is required. 	 The price obtained for scrap metal may be lower because costs might include services for crushing cars or removing fluids.

Option 3: Tribe contracts for all transport, car crushing, hazardous waste removal, and metal recycling.

Pros	Cons
 Metals recycler or subcontractor is responsible for all activities. Tribal staff only needs to provide oversight of activities occurring on tribal lands. 	 The cost to pay for all activities may be greater than the price obtained for the scrap metal.

NOTE: In some cases it may not be feasible to remove the vehicles in a timely manner. In that case, a tribe may choose to drain the fluids from the vehicles and remove the hazardous waste, and then prepare the vehicles for future removal.

Resources for Automotive Recycling and Pricing*

General Information

- Call a local scrap metal recycler and request current prices for heavy and light steel
- Recycle Net provides pricing for scrap metal, automotive recycling, and tires and rubber: http://www. recycle.net/price/
- End-of-Life Vehicle Solutions provides general information and materials: http://www.elvsolutions. org/
- Demolition Scrap Metal and Salvage News: http://www.demolitionscrapmetalnews.com/

Recycling Information

- Global Recycling Network: http://www.grn.com/a/view/2010.html
- Recycle IN me : http://www.recycleinme.com/buyoffers/default.aspx

Steel Recycling and Prices

- Steel Recycling Institute: http://www.recycle-steel.org/
- Steel Exchange: http://www.steelchange.com/a/8005.html
- Steel Markets Daily: http://www.platts.com/Metals/Newsletters&Reports/steeldaily/
- Steel on the Net: http://www.steelonthenet.com/prices.html
- California Department of Conservation (steel cans, glass, aluminum cans, and plastic): http://www. consrv.ca.gov/dor/Notices/Pages/scrap_values.aspx
- John Harris, Ferrous Division Director, ArcelorMittal Steel john.harris@arcelormittal.com, http://www. arcelormittal.com/

Scrap Metal Recycling and Prices

- Institute of Scrap Recycling Industries, Inc. (ISRI): http://www.isri.org/
- North American Scrap Metal Network: http://www.scrapspot.com/

* This document was produced by the Environmental Protection Agency (EPA) Region 9 Tribal Solid Waste Program. Mention of trade names, products, or services does not convey, and should not be interpreted as conveying official EPA approval, endorsement, or recommendation.

Factors Affecting Cost and Revenue

Often the revenue generated from recycling vehicles does not completely cover the collection and disposal costs. Abandoned vehicle abatement programs may either cost the tribe money or generate revenue, depending on the following factors:

- The price of scrap metal (refer to Resources for Scrap Metal Pricing).
- Proximity of the metals recycler to the tribal lands. The further away the metals recycler is, the higher the costs of transporting the vehicles.
- If the tribe already owns heavy machinery. Renting or contracting for heavy machinery to transport and crush the vehicles can add to costs.
- The number of vehicles that are collected. Typically, the more vehicles the tribe collects, the lower the cost. Some auto dismantlers will process and remove vehicles for free or even for payment, given enough vehicles. The tribe may want to guarantee a minimum number of vehicles when negotiating with the metals recycler.

• Where the vehicles are found. If the vehicles are in remote locations or are difficult to extract, then removal and transportation costs will be high.

Steps for Collecting and Disposing of Abandoned Vehicles

Tribes have the authority to regulate abandoned vehicles on tribal land. Check with your tribe to see what tribal codes and ordinances may address abandoned vehicles and what authority the tribe has to remove them. If no codes exist, consider working with your tribal government to write codes specifying how and when vehicles can be collected and removed by the tribe. Conversely, the tribe may choose to have a completely voluntary program. These are the basic steps for collecting and disposing of abandoned vehicles, whether preformed by the tribe or by a contractor.

Step 1: Planning Your Collection Program

- Establish who will coordinate the program.
- Determine which components of collection, processing, and disposal the tribe will perform and which components the tribe will contract. See Options for Collecting and Disposing of Abandoned Vehicles on Tribal Lands on pages 2 and 3 for details on the options available.
- Develop a standard procedure for identifying and collecting vehicles. Things to consider include:
 - Will the tribe accept inoperable vehicles from tribal members' property, as opposed to collecting only abandoned vehicles? If so, will there be a charge for collection?
 - How will requests to collect abandoned vehicles be made? Will there be a hotline? Will requests need to be made in writing?
 - How will the tribe document the vehicles collected? (See Step 3: Completing Appropriate Paperwork.)
 - Will the tribe need to get permission to enter the property where the vehicles are located?

NOTE: If the vehicles are not on tribal land, or the metals recycler you are working with requires compliance with state regulations, you may need to consult with your state or local department of motor vehicles. Also, a local sheriff's department may be able to determine whether a vehicle belongs to a tribal or non-tribal member if they are provided with the vehicle's VIN numbers.

California: www.dmv.ca.gov

- Requires a lien sale (California Civil Codes 3071 & 3072) for abandoned vehicle removed.
- How to conduct a lien sale in California: http://www.dmv.ca.gov/pubs/brochures/howto/htvr7.htm

Arizona: www.azdot.gov

• Requires an abandoned vehicle inspection or the title to the vehicle for removal.

Nevada: www.nevadadot.com

• Private landowners must contact local law enforcement and/or towing services for removal of an abandoned vehicle.

 Create a health and safety plan for all activities – vehicle collection and storage, fluid removal, crushing, etc. Prior to initiating activities, hold a safety kick-off meeting to discuss the safety hazards that the crew may encounter and provide training to staff to ensure proper handling of equipment, spills, and safe vehicle transport.

For vehicle collection and storage, include:

- Animals, reptiles, or insects
- Dust
- Sharp edges

For fluid removal, include:

- Spills
- Slippery areas

For crushing, include:

· Heavy and sharp objects

Training Ideas for Tribe Staff:

- 40-Hour HAZWOPER
- Freon/coolant extraction
- Airbag deployment and removal
- Heavy machinery operation
- Create an outreach plan for the community. An outreach plan should include the health and safety risks of abandoned vehicles, specific information about how to request vehicle removal, and the dates that the collection and/or car crushing will take place. For more information on creating an effective outreach plan or program, see the EPA publication Tribal Decision-Maker's Guide to Solid Waste Management, Chapter 6, Public Education and Community Outreach (EPA530-R-03-013), available at http://www.epa.gov/epawaste/wyl/tribalguide.htm.
- Create a tracking system to record the number of vehicles collected, where they were collected from, type of vehicle, whether it was abandoned or donated, etc.

Step 2: Identifying Abandoned Vehicles for Collection

Abandoned vehicles can be identified for collection the following ways:

- Owner of the vehicle requests removal
- A community member requests removal of an abandoned vehicle
- · Tribal staff observes abandoned vehicle
- In public right-of-way
- In an illegal dump
- In open range area

NOTE: The project manager should be aware of how to identify a mobile methamphetamine lab, and the hazards associated with them. For more information refer to Issue 6 of EPA's Tribal Waste Journal (June 2008) entitled METHAMPHETAMINE: Threatening the Health and Environment of Tribal Communities (http://www.epa.gov/epawaste/wycd/tribal/pdftxt/twj-6.pdf).

For each abandoned vehicle identified, collect the following basic information, which will be used in Step 3:

- · Map coordinates to identify the location of the vehicle
- Photograph of vehicle
- Vehicle Identification Number (VIN) (typically on dash, door, or frame)

NOTE: Advertising your collection event may allow for more active participation from the community. If the community is aware of your event they may be able to identify more vehicles for collection and removal. If the tribe has a newsletter, newspaper, or radio or television station, use this to advertise your collection event or program.

Step 3: Completing Appropriate Paperwork

The following are tips and examples for documenting collection of the vehicles, but each tribe may have a slightly different system.

If the owner of the vehicle requests removal

Ask the owner to fill out an authorization form and sign the title of the vehicle over to the tribe (or contractor) to be scrapped. Inform vehicle owners that it is their responsibility to remove anything they want from the vehicle, including radios, parts, and/or tires. The authorization form should include:

- Does the requestor have a title?
- Does the requestor own the vehicle? If not, who does?
- · Does the requestor have permission to remove the vehicle?
- Vehicle make
- Vehicle model
- Color
- Year
- License Number
- Vehicle Identification Number (VIN) (typically on dash, door, or frame)
- Reason for removal
- Signature granting the tribe permission to collect, dismantle, and recycle the vehicle(s) listed

Work Order #							
Requested By: Phone Number: Village/Location: # of Vehicles Requested:		To	Today's Date: Request By Date:				
		Re					
		Alternative Contact:					
		Alternative Contact Phone #:					
		CLE INFO plete for Ea					
Make: M	fodel		C	olor:			Year:
Vehicle Identification Number (VIN)			25		-	License Plate	÷
Reason for Removal (Circle As Appropriate) A. No longer want B. In way of const F. Owner Incarcerated G. Other (Des		C. Taki	ng up	space	D.	Does not wor	k/run E. Owner Deceased
Does the Requestor have a Title for the vehicle?	?	□ Yes		No			
Does the Requestor own the vehicle?		□ Yes		No	If "No",		
			1255		explain:		-
Does the Requestor have permission or remove	the vehicle'	?		Yes	D No		-
Location/GPS:							
Please provide a r	nap of the v	ehicle loca	tion or	the l	ack of th	is Order Forn	1
I, [NAME], hereb aforementioned vehicle(s), after having given th							
Authorization Signature:			23			Date:	
Tribal Authority Representative Signature						Date:	

If no owner is apparent

Option 1: Find out if there is a title (also known as a "pink slip") for the vehicle. Contact the owner to have the title signed over to the tribe.

Option 2: If there is no title, research the Vehicle Identification Number (VIN). The VIN should be searched by the local police department or the state department of motor vehicles to determine the registered owner of the vehicle or if the vehicle has been stolen.

- If the vehicle has been stolen, then it should be impounded or the insurance company should be contacted by the local police department.
- If the vehicle is not stolen and the individual requesting the vehicle to be removed is not the registered owner, or if the vehicle was removed from tribal land with no individual requestor,

then a letter should be sent to the registered owner notifying them that their car has been found and that they have a specified period of time (usually two weeks) to notify the tribal agency if the vehicle should be scrapped or if they would like to claim it. (Note: If the registered owner would like to claim the vehicle, they should be notified that it is their responsibility to transport/move the vehicle.)

Option 3: A vehicle is owned by someone who is not going to return for the vehicle (i.e., the owner has moved or is otherwise unavailable) and the vehicle has been abandoned for a period of time as set by the tribe or tribal ordinance, then a tribal ordinance may require the vehicle to be removed. The property owner (if not the tribe) should sign a wavier asking the tribal agency to remove the vehicle.



Step 4: Transporting the Vehicles

- Decide whether the tribe will transport the vehicles or if the tribe will contract for transportation.
- Decide whether the vehicles will be transported to a central location or directly to an auto dismantler. If the vehicle does not have tires, check the vehicle storage yard for usable tires to move the vehicle.

Tips for Choosing a Centralized Storage Area

- Area should be dry and flat. Avoid flood plains and areas with a high water table. Ideally the area would be lined or have concrete pad to prevent fluid releases to soil and groundwater.
- A storage area should be surrounded by fencing and locked when not in use.
- Precautions should be taken to reduce vandalism and trespassing.
- Try to work with other tribal programs to share storage area and equipment.
- Consider the ease of transporting and storing vehicles in this area, as well as the machinery that may need to enter this area (i.e., vehicle carriers, crushers, forklifts, etc.).
- Provide for proper storage of fluids that have been removed from vehicles.

Step 5: Processing the Vehicles

Decide if the tribe will process the vehicles or if the tribe will contract with the auto dismantler for processing. Ensure that either the tribe or contractor has a hazard-



Vehicle collection by the Tohono O'odham Nation. The Tribe owns the equipment to collect the vehicle from where it was abandoned and transport it to a centralized storage area.



Fluid collection at the Hopi Tribe. The tribe subcontracts all activities to prepare the vehicles for crushing. Fluids are removed from the vehicle and placed into secondary containers. Anti-freeze and oil are recycled. Mercury switches are handled and disposed of as hazardous waste. Gasoline is disposed of by an environmental waste management service.

ous waste management plan that describes how the tribe or the contractor will manage waste in a safe manner and ensures handling of all wastes complies with all applicable federal, state, and local laws and regulations. For examples of a Hazardous Waste Management Plan go to:

- University of Hampshire http://www.unh.edu/ehs/pdf/HWMP.pdf
- General Mitchell International Airport-Air Reserve Station
 http://www.afcee.af.mil/shared/media/document/AFD-070827-068.pdf

In areas where fluid removal and storage will take place, maintain a spill kit with the following:

- Absorbent material
- Oil dry (an oil absorbent)
- · Shovel and broom
- Disposal bags, extra barrels/drums, or other containers
- Safety glasses
- Disposable gloves and rubber gloves
- Rolls of heavy plastic

Prior to crushing, to process the vehicles:

- Remove fluids and place them in secondary containers. Fluid removal should be conducted over areas that are lined and covered with sand, or on a concrete pad. If possible, remove fluids within a covered area. If any spilling or leakage is encountered, be prepared for immediate cleanup and containment. Ensure that appropriate fluid removal and handling equipment are used, including drip pans and funnels. After removing fluids, store the fluids in separate and appropriate containers (never mix fluids) in a designated area that is covered and provides for secondary containment. Antifreeze, oil, and other lubricants may be recycled.
- Remove the tires from the rims in order to recycle the rims with the vehicles.

When contracting for vehicle processing and crushing, you may want to request the following in your Request for Quotation (RFQ) for the service, in addition to a price quotation:

- Site safety plan
- Site cleanup plan
- Spill mitigation and prevention plan
- Business licenses
- Proof of insurance/liability
- Crushing and removal plan
- Does vendor take refuse?
- Does vendor remove oil-stained soils?
- How will the contractor handle fluids, mercury switches, batteries and tires
- Confirmation that all contractors and subcontractors have the appropriate certifications and licenses (i.e., certification for recovery of air conditioning refrigerants, drivers must have a Commercial Driver's License (CDL) Class B drivers license)When reviewing/comparing bids or quotations, determine if the metals recycler is a trustworthy business, if the metals recycler has a green certificate, and compare the fees charged or the amount of money offered for the scrap metal.
- Remove components that may be recycled (i.e., catalytic converters, batteries).
- Remove mercury switches, which are handled as hazardous waste and disposed of as hazardous waste under the tribe or metal recycler's hazardous waste generator identification number, as appropriate.
- Remove and dispose of gasoline tanks.
 - Fuel should be removed from all tanks.
 - Fuel tanks must be removed from the vehicles prior to crushing.
 - Allow fuel tanks to completely dry and fully ventilate.
 - Store fuel tanks on a curbed intact concrete surface that is well ventilated and protected from rainfall.
 - Work with your metals recyclers to determine the best method to dispose of or recycle the fuel tanks.

NOTE: When processing the vehicles, you should track amounts of waste processed and fluids removed, so that that information can be used in Step 8. You may wish to create a database to organize this information.

Step 6: Crushing the Vehicles

If crushing occurs on tribal land it should take place over an appropriately lined or concrete area. Arrange for a large dumpster to be placed in the vehicle storage yard for placement of loose metals. Try to plan crushing activities during mild weather conditions, since weather (rain, snow, and high temperatures) can increase the risk for spills and other health hazards. Post a sign on the fence of the vehicle storage yard stating the following:

- "No Trespassing"
- The name of the tribal authority
- Contact information, including a phone
 number



Vehicle crushing by the Hopi Tribe. The crusher is contracted by the Tribe and arrives to crush vehicles collected in a centralized location. To reduce cleanup needs crushing should take place over drip pads or other absorbent material.

Step 7: Cleanup

If the crushing occurs at the metal recycler, no cleanup plan is needed. However, if the vehicles are collected and crushed on tribal land, ensure that a cleanup plan is followed.

A cleanup plan should include the following:

- How to address leaks and spills from fluid removal and crushing activities.
- General operating procedures for maintaining clean collection and crushing areas.
- Procedures for cleaning up the crushing area after each crushing event.
- If crushing occurs over sand on top of a protective liner, include procedures for removal and disposal of the sand while maintaining the protective liner integrity.
- If crushing occurs over concrete, include procedures for cleanup of fluids from the concrete surface (i.e., what sorbent material will be used, how it will be disposed). Include procedures for inspecting the concrete for cracks.
- Include procedures for the cleanup of other hazards such as broken glass, metal shards, and scrap tires.
- Consider other procedures that many be site-specific.



Vehicles are sorted



Stacked on a transport vehicle



Vehicles being transported to the metals recycler/purchaser

Step 8: Evaluation, Record Keeping, and Reporting

Evaluation

Evaluate your program to provide information for future abandoned vehicle collection events. Consider evaluating each step of the process for:

- What was successful,
- What could be improved, and
- What might you do differently in the future?

Record Keeping

Record keeping is valuable in case questions arise about individual vehicles. Keep all records from the collection program in a central place. Determine who is in charge of keeping records and how long they must be kept. For example, the tribal administration office may be in charge of keeping records for a minimum of 3 years. Records should include:

- Number of vehicles removed and from where vehicles were removed
- Vehicle licenses or identification numbers
- Vehicle removal forms
- · Copies of any and all contracts for hauling, crushing and metals recycling
- Copies of the outreach plan, health and safety plan, and the cleanup plan
- Program evaluation document

Reporting

Once the program is complete, make sure you report the success of the program to the community, to the tribal council, and to any agency that may have contributed funds to the cleanup. Reporting may include the number of vehicles removed, tons of metal recycled and gallons of fluids properly recycled or disposed of. Keeping the community informed about the program is important to build community and tribal government support for future collection events. Developing education and outreach materials to be distributed before, during, and after the collection event could be beneficial to the program, especially if the program is conducted throughout the year.

abandoned vehicle	Any vehicle previously used for transportation that is no longer in working condition and left along the roadside, in open areas, or on private property.
auto dismantler	A person who carries on the business of demolishing or dismantling motor vehicles, parts, or accessories for motor vehicles.
centralized storage area	An area where the tribal authority stores collected vehicles, that can be managed and secured, typically on property owned and operated by the tribal authority and near tribal offices.
contaminants	Any chemical of concern that has been released to the environment, and may pose a threat to human health and the environment.
disposal	The method of getting rid of an object.
environmental waste management service	A company that collects and recycles or disposes of chemicals of concern, such as used oil and spent solvents.
fluid removal	The draining and collection of all fluids from a vehicle, including, but not limited to fuel, oil, antifreeze, brake fluid, and transmission fluid.

Glossary of Terms

green certificate	A company that is certified to offer green and renewable services to their clients.	
hazardous waste	Any waste listed by EPA as hazardous or any waste that is ignitable, corrosive, reactive, or toxic.	
inoperable vehicle	See "abandoned vehicle."	
junk vehicle	See "abandoned vehicle."	
metal recycler	A person or company whose primary business is that of compacting, shredding, or otherwise processing metals for resmelting, recycling, or resale.	
municipal waste	A waste type that includes predominantly domestic waste.	
pink slip	See "title."	
registered owner	Refers to the person who has right of possession of the vehicle, as opposed to the party who owns the property where it sits. Also, the person whose name is listed on the vehicle title.	
salvage vehicle	See "abandoned vehicle."	
scrap metal	Any metal that is discarded and suitable for reprocessing.	
secondary container	A structure that contains the primary container. In the instance of a spill or leak, the secondary container would contain the hazardous material stored in the primary container.	
spill kit	Kit that provides for containing, removing, and disposing of spilled vehicle fluids and quickly cleaning and containing the spill site. Spill kits may include spill pans and other absorbent material, safety equipment (i.e., gloves, eye protection), and a container for placing used absorbent material.	
title	A legal form that establishes a person or business as the legal owner of a vehicle.	
vehicle collection	The collection of abandoned vehicles located throughout tribal lands, to be stored in a central location or transported to a vehicle crusher and metals recycler.	
vehicle crusher	Machine that compacts the vehicle in preparation for recycling. Often vehicles are crushed before being transported off-site.	
Vehicle Identification Number (VIN Number)	A unique serial number used to identify individual motor vehicles.	
vehicle owner	The person who owns the vehicle. In the case of abandoned vehicles this may or may not be the legal owner of the vehicle (i.e., person whose name is on the title), but the owner of the property on which the vehicle was abandoned.	
vehicle shredding	Vehicle shredders are machines that perform two primary tasks, shredding and separation. The shredding process chops the vehicle into small pieces no larger than a fist. Once shredded, the pieces are separated according to material type (various metals, glass, heavy rubber, and plastic).	
vehicle transporter	A tractor trailer that can safely transport vehicles. This may be used to collect abandoned vehicles on tribal lands or to transport vehicles to the metals recycler or vehicle crusher and shredder.	

EPA Region 9 Waste Management Division contact information:

Office Manager 415-947-8708

WST-7 75 Hawthorne Street San Francisco, CA 94105

Email: baker.michelle@epa.gov

