

## Solid Waste Disposal

Solid waste means any garbage, refuse, sludge from a waste treatment plant, a water supply treatment plant, an air pollution control facility, or other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, agricultural operations or from community activities. Solid waste **does not include the following:**

- solid or dissolved material in domestic sewage or solid or dissolved materials in irrigation return flows or industrial discharges which are point source subject to permits under Section 402 of the Federal Water Pollution Control Act Amendments;
- source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954; or
- manure or crop residues returned to the soil at the point of generation as fertilizers or soil conditioners as part of a total farm operation; or
- vegetative matter at composting facilities registered under IC 13-7-35.

When less than 100 kilograms of special or hazardous waste (excluding acute hazardous waste) has been generated in a single month, and disposed of in quantities of less than 100 kilograms, it can be considered a solid waste. Normally these materials may be disposed in any special waste landfill. The solid waste rule establishes four types of land disposal facilities:

**municipal solid waste landfill or MSWLF** - permitted to receive household waste, RCRA Subtitle D waste, such as commercial solid waste, nonhazardous sludge, and industrial solid waste.

**nonmunicipal solid waste landfill** - designed to accommodate general types of solid waste, excluding municipal solid waste, hazardous waste regulated by 329 IAC 3.1, and operated by spreading the waste in thin layers, compacting it to the smallest practical volume, and covering it with cover material at the end of each working day.

**construction/demolition sites** - accepts only construction/demolition waste.

**restricted waste sites**- generally receive only one type of waste.

### EXCLUSIONS

The following solid waste management activities are not subject to the above disposal provisions (i.e. - the following materials do not require disposal at a sanitary landfill).

- uncontaminated rocks, bricks, concrete, road demolition waste materials, or dirt;

- land application activities regulated by IAC 6 and 327 IAC(sewage sludge and wastewater)
- processing and disposal of uncontaminated and untreated natural growth solid waste including tree limbs, stumps, leaves, and grass clippings greater than 3 feet in length;
- disposal of saw dust which is derived from processing untreated natural wood;
- The legitimate use of iron and steel making slag including the use as a base for road building, but not including use for land reclamation;
- the legitimate use of foundry sand which has been demonstrated as suitable for restricted waste site type III under the provisions of 329 IAC 10-9-4 including the use as a base for road building, but not including use for land reclamation
- uses of solid waste may be approved by IDEM if it is determined to be a legitimate use that does not pose a threat to public health and environment;
- confined feeding control activities regulated by 327 IC 13-1-5.7;
- Wastewater discharge activities regulated by 327 IAC 5;
- Processing, except for incineration, in which the waste, other than tires, has been segregated from the general solid waste stream prior to arrival at the processing site;
- Processing, except for incineration, of solid waste which takes place at the generating facility;
- The disposal of coal ash, transported by water, into an ash pond which has received a water pollution control facility construction permit under 327 IAC 3;
- The operation of surface impoundments; however, the final disposal of solid waste in such facilities at the end of their operation is subject to approval by the commissioner except as excluded under subdivisions (9) and (11);
- The disposal of coal ash at a site receiving a total of less than one hundred (100) cubic yards per year from generators who each produce less than one hundred (100) cubic yards per year;
- Uses and disposal of coal waste as exempted from regulation in IC 13-1-12-9.

The materials excluded from the regulation do not have requirements on their disposal. These materials may be buried or re-applied to the land.

## **VEGETATION**

Vegetative matter resulting from landscaping projects maintenance and land-clearing projects may be disposed of at a solid waste landfill. This material includes:

- grass;
- woody vegetative matter (i.e. twigs, branches) that is less than 3 feet in length and is bagged, bundled, or otherwise contained;

- very small amounts of vegetative matter that is less than 3 feet in length and is bagged, bundled, or otherwise contained or combined with other solid waste.

IDEM encourages the use of composting facilities and alternative management practices for materials that are now exempt from the ban and materials that are still subject to the ban. Open burning of vegetative matter and wood material is allowed only under certain conditions. Open burning of solid waste is prohibited in all circumstances. Contact the local Health Department or Solid Waste Management District for more information about ordinances prohibiting open burning in your area. All necessary permits and approval should be obtained prior to burning.

### **ROAD DEMOLITION WASTE**

Road demolition waste is defined as reinforced or unreinforced concrete or solidified asphalt. Concrete and asphalt are not considered hazardous materials. These materials may be used as clean fill on projects or may be buried on INDOT's property. If the material is to be buried on INDOT's property, permission must be received from the Project Engineer. This material should be placed in an area where there will be no construction activities. When burying material on private property, written permission must be received from the property owner. Necessary arrangements shall be made with the owner for obtaining suitable disposal locations. Wood may also be buried with permission from the Project Engineer.

Do not bury waste material in the floodway or waters of the U.S. without the proper permits.

### **SLAG**

Blast furnace slag is a by-product of steel, copper and iron manufacturing. INDOT uses this material as a substitute for aggregate. Improperly aged slag, "green" slag, can produce a leachate that is very basic (high pH), gives off a sulfurous (rotten egg) smell, and has a greenish tinge. When the leachate is exposed to air, oxidation occurs, causing the pH to decrease and the leachate to change to a whitish color. The leaching rate diminishes rapidly with time. Because "green" slag leachate can violate Indiana Water Quality Standards, it is recommended that "green" slag should be aged at least six months to allow the slag to cure. The curing makes the slag amenable for beneficial reuse in road construction projects and as a cement admixture. This aging process will virtually eliminate any leachate problems. Before using this product, consult with the Division of Operations Support.

## **REMOVAL AND DISPOSAL OF MATERIAL AND OBJECTS FROM THE RIGHT-OF-WAY**

### POLICY

In order to properly maintain the highway right-of-way, downed trees, foreign objects, trash, waste material, and other similar items which will adversely affect traffic safety and general appearance will be removed and disposed of from highway right-of-way.

### PROCEDURE

1. All tree trimming and tree removal shall be in accordance with provisions of operating procedure #14 and as further directed:
  - (a) On limited access right-of-way and rest areas the District Landscape Supervisor will be responsible for all tree trimming and tree removal. His approval must be obtained before any work is done.
  - (b) On all other highways a reasonable effort will be made to contact the adjacent landowner and provide him with the first priority for possession of the usable wood. In the event the landowner wants the wood, it will be left at the job site on the landowner's property off the right-of-way, for removal by landowner in the same size pieces as are placed on trucks for loading. The tree trunks and limbs will be cut into lengths necessary for loading. A "reasonable effort" shall be a personal contract at the residence on the landowner's property with either the owner or tenant. If there is no one at home a note will be attached to the front door. The contact and/or note will be twenty-four (24) hours before the tree is removed.
  - (c) If the landowner does not want the wood or cannot be contacted with reasonable effort, the wood will be hauled to the nearest unit center, or to the nearest roadside park, and placed outside the fence in an area readily accessible to the public, such as the employee's parking lot. A sign shall be erected identifying it as "Free Wood." The wood could be taken by anyone. It will not be loaded or taken in state vehicles or on an employees work time.
2. Removal and disposal of foreign objects, animals, fowls and other similar items:
  - (a) The Indiana State Police and/or local law officials will be contacted in an attempt to find the owner. If the owner can be identified, any such item

will be turned over to the rightful owner. Costs incurred in removal of the item(s) will be paid by the owner prior to return of the item. The Account Receivable Section of the Division of Accounting and Control shall be notified of the owner's name, costs incurred and a brief explanation so that an account receivable can be established. The owner should make out a check to the Indiana Department of Transportation for the total costs incurred. This check shall be sent immediately to the Agent Cashier in the Division of Accounting and Control with a brief explanation.

- (b) If the owner cannot be identified the foreign objects and other items will be placed in the next 210 sale.
- (c) When the owner cannot be identified:

Live animals, fowls or other perishable objects shall be sold at market price to the nearest place of business dealing in the item. Payment will be made by check made out to the Indiana Department of Transportation. This check shall be immediately forwarded to the Agent Cashier, Division of Accounting and control with a brief explanation. A copy should be forwarded to the subdistrict or district for their file.

- 3. Dead animals and fowls will be disposed of as trash or buried. If a dead deer is found, the local conservation officer will be notified. If he is not available, contact will be made to the local law enforcement officer.
- 4. The removal of items left on the right-of-way as the result of a wreck or accident shall be the responsibility of the owner. If the owner refuses to remove these items, the Indiana Department of Transportation will remove and dispose of them, and keep a complete record of all costs which will include man-hours and equipment hours, cost of disposal and traffic control. These costs should be documented (by the Subdistrict or District) on Form M-54, State Form 35480, Worksheet - Damage to State Property. The district should send this form and a copy of the State Police Report to the Division of Accounting and Control for further processing.
- 5. Soil, aggregate, asphalt paving material or broken concrete, removed as part of routine maintenance activities, shall be disposed per Operating Procedure #16 and Procedure #21.

Disposal of waste materials shall be at the discretion of the subdistrict manager. Disposal shall be by that method which is most advantageous to the Indiana Department of Transportation.

#### COMMENTS

This procedure shall be in effect on receipt of or no later than May 20, 1991.

## **PROCEDURE FOR TREE TRIMMING AND REMOVAL, AND FOR CONTROL OF WOODY VEGETATION**

### POLICY

The department shall maintain or control woody vegetation and trees within the right-of-way, to improve safety for the motorist and to control the spread of vegetation onto adjacent property while considering aesthetic benefits from this vegetation.

### IMPLEMENTATION

Improve safety of the motoring public will be promoted by controlling woody vegetation and trees within certain minimum distances from the edges of roadsides as further set out in sections A-D below.

A. Highway with greater than 40' distance from the edge of pavement to the right-of-way line (interstate and freeway type facilities).

1. No tree form vegetation will be permitted between the edge of the pavement and a point 8' beyond the bottom of the ditch line unless protected by guardrail. Volunteer trees within this area should not be allowed to reach a diameter of 4" at the ground line. This applies to both median and outside shoulders. Where road sections do not have the minimum 40' distance. Refer to section 2(b).
2. Trees shall not be allowed to grow into any right-of-way area from which they could fall onto roadway or ramps.
3. No tree form woody vegetation located between, under or adjacent to bridges will be allowed to reach a height even with the bottom of the superstructure.
4. Trees and brush will not be allowed to grow into, or clog ditches or other drainage ways.
5. Shrub form woody vegetation shall not be permitted within 30' of the edge of pavement, unless included as part of a formal landscape planting or protected by guardrail.

B. Highway with 10-40 foot distance from edge of pavement to right-of-way line.

1. No woody vegetation shall be permitted from the edge of the pavement to within 8 feet of the bottom of the ditch line on the backslope. Shrub form woody vegetation may be permitted in this area if protected by guardrail. Distances on the backslope may be less depending on width of right-of-way. Distances from the bottom of the ditch may also be reduced where backslopes are steeper than 2:1 and where height of slope prevents contact between vehicles and trees.
2. Woody vegetation may be permitted beyond 8 feet from the ditch bottom so long as it does not interfere with other highway operations.
3. No tree form woody vegetation located between, under or adjacent to bridges will be allowed to reach a height even with the bottom of the superstructure.
4. Trees and brush will not be allowed to grow into, or clog ditches or other drainage ways.

C. Highway with less than 10 foot distance from the edge of pavement to the right-of-way line.

1. No woody vegetation shall be permitted between the edge of the pavement and the right-of-way line, except where backslopes exceed 2:1 and where height of slope prevents contact between vehicles and trees.
2. Vegetation behind guardrail should be controlled to the right-of-way line.

D. Priorities of work to be performed.

Because of the quantity of work to be performed it is necessary to prioritize the work effort to provide for orderly control of unwanted woody vegetation. In general the following should apply, with categories of work being completed before proceeding to the next. The exception will be the active control of small vegetation through the application of herbicides to prevent the need for expensive mechanical control at later dates.

1. Trees known to be hazards based on reports from law enforcement agencies or observed to be damaged by collision with a vehicle.
2. Trees in categories B & C above and located on outside radii of curves.
3. Trees observed or reported to be deteriorating and of potential hazard to the public.
4. Trees on the cut slope or within the safety zone.

5. Trees located in ditch bottoms where an errant vehicle might be directed along the ditch into an impact.
6. Trees behind guardrail and around bridges.
7. Trees growing into INDOT fences or other structures.
8. Small trees or brush in any location where it is not desired.

It may be generally desirable to schedule tree and brush work in conjunction with resurface work. Critical trees may be more readily removed if considered as a part of safety upgrading of the facility.

All wood generated as a result of this policy shall be disposed of per Operating Procedure 13 of the Field Operations Manual. The stumps of all woody vegetation removed under this procedure shall be treated with herbicide to prevent sprouting except for coniferous (evergreen) species.

There are several areas in the state where particular trees have unique historic value. There are also designated scenic routes controlled by the Indiana Department of Natural Resources. Before INDOT can do routine work on trees in these areas special coordination with local historical societies or the Indiana Department of Natural Resources must be done. We will work closely with other agencies to preserve historic and scenic trees while maintaining the safety of the roadway.

NOTE: Prior to cutting trees where right-of-way lines are not clearly defined permission from adjacent property owners must be obtained. Particular care must be given to trees which may be owned by adjacent property owners under retained timber rights. Refer to Operating Procedure 13 for disposal of wood. Form M-46 should be used as needed to document property owner consent. This section will not apply to any limited access right-of-way.

### GUIDELINES

The following are to be used as general guidelines on INDOT responsibility for trimming and removal of trees adjacent to the roadways. These guidelines do not cover every situation. Individual unique situations should be referred to the district landscape supervisor.

- A. INDOT will not normally maintain trees where property owners have retained timber rights. Where such trees are known to exist and where they are hazardous to persons using the highway, INDOT will advise the owner of his responsibility to remedy the situation. Where the owner fails to take action within a reasonable period of time, INDOT will remedy the situation in the least costly method available.



- B. INDOT will not maintain, remove or trim trees inside incorporated municipalities which are located in grassy strips, between the edge of pavement and sidewalk except that trimming or removal may be done if:
  - a. A hazard exists that must be remedied and the city is unable to fulfill their obligation in a timely manner.
  - b. INDOT has in the past assumed responsibility for tree care in a municipality and transfer of that responsibility to the municipality would cause a considerable hardship on it.

NOTE: Generally, incorporated municipalities have responsibility for maintenance of trees to the corporate boundaries even though there are no curbs or sidewalks and INDOT mows grass.

- C. INDOT will not trim or remove trees for aesthetic reasons if the requesting party has not indicated a suspicion of potential damage to his property or to motorists using the roadway. (i.e. the requesting party indicates he doesn't like the shape of the tree, or it affects his scenic view, or the tree is messy). INDOT will trim or remove trees when determined to be potential hazards to the roadway or to private property.
- D. Unincorporated municipalities shall be treated the same as rural sections for the purpose of this procedure.
- E. INDOT shall adhere to tree trimming and removal techniques which will result in the least possible chance of damage or hazard during the work period or in the future.

#### COMMENTS

This operating procedure replaces policy letters HO-MN-42 and HO-MN-83.