

**Administrative Procedures and Policies for Prairie Dog Control
Projects on Public Land
WEB SUMMARY
City and County of Broomfield
September 20, 2007**

Current Policy:

The Policies for Prairie Dog Conservation and Management (“Policies”) allow for the use of both aluminum phosphide and carbon monoxide for the lethal control of prairie dogs. Based on the previous discussions with OSTAC, lethal control of prairie dogs in areas of high public use is currently administered with carbon monoxide cartridges. High public use areas were deemed to include trails or areas that are commonly visited by citizens. Please note that the administrative procedures below do not change the notice requirements outlined in the Policies in Section 4.2 related to construction/development projects and associated impacts on prairie dog colonies.

Background and Issues of Concern:

These issues are based both on the observations of Broomfield staff and from the discussions with other public land managers that participate in the Front Range Working Group, an organization that focuses on best practices for prairie dog management:

- Staff has found the carbon monoxide cartridges to be largely ineffective in controlling prairie dogs. The estimate from the Parks Maintenance staff and the private contractor is that the cartridges are less than 50% effective in the lethal control of prairie dogs. This rate of effectiveness is consistent with other governmental entities using this method. It has been suggested by other land managers that for the carbon monoxide cartridges to be effective they must be applied three to four times to the same area on consecutive days.
- The carbon monoxide cartridges are significantly more expensive than other options. Currently the City’s contractor charges \$7.50 per burrow for the use of carbon monoxide and \$2.25 per burrow for aluminum phosphide given one application. Staff completed a bid process in 2006 for this work and these were the least expensive rates submitted.
- There are other negative effects on open space and aesthetics as the burrows are frequently dug out by the prairie dogs shortly after the application of the carbon monoxide cartridges. This causes the burned cartridge and the paper used in the application to be ejected onto the open space. At a recent control project at BCC Open Space the cartridges and paper were littered around the open space in the days after the application and the Parks Maintenance staff had to return to the site to clean up the debris.
- The application of the carbon monoxide cartridges is more time consuming and can potentially cause some fire risk. The carbon monoxide cartridges are about five

inches long and each one needs a fuse to be inserted into the cartridge and then lit, before being placed in the burrow. The cartridge burns in the burrow releasing the carbon monoxide, while the burned casing around the cartridge remains. Alternatively, the aluminum phosphide pellets are small capsules that react with the moisture of the soil in the burrow and completely dissolve with the application.

- Information on public safety and impacts on wildlife was presented to OSTAC in 2006. Staff researched the affects to humans or pets from the use of carbon monoxide or aluminum phosphide for prairie dog control. The findings are summarized below:
 - According to the EPA and the Department of Agriculture, both alternatives are considered safe when used properly by a licensed operator.
 - Published standards for the amounts or exposure of either substance that would be harmful to humans only pertain to confined spaces such as mine shafts and coal cars.
 - Staff could not find any studies or warnings that would pertain to open space/open air conditions.
 - Staff specifically tested carbon monoxide and found that the gas only accumulated to a dangerous level within a sealed burrow and quickly disperses above ground in open air.
 - In a survey of neighboring municipalities using these substances, there were no known cases of harm to humans or pets from either substance in prairie dog control projects.

Staff Administrative Procedure:

Staff plans to continue to use carbon monoxide cartridges in trail corridors with 20-foot buffers along each side of the trail and in any park areas such as playgrounds, athletic fields, picnic areas, and buffer areas against homes (50-foot within private residences). For other open space areas, (outside of the 20-foot buffer on either side of the trail, the 50-foot buffer for homes, parks, athletic fields, picnic area, and other areas of high public use), prairie dog management will use aluminum phosphide instead of the carbon monoxide cartridges based on the issues listed above.

Public notice signs will be posted when either carbon monoxide cartridges or aluminum phosphide tablets are used for prairie dog management for prairie dog control on publicly owned lands. For the application of carbon monoxide, signs will be placed early in the morning before the control takes place and will be removed at the end of the day. When aluminum phosphide is used, public notice signage and closure of the area for a 24 hour period will occur. It should be noted that there are no requirements or standards for the signage required by the City and County of Broomfield policies or any regulatory agency for the use of these substances for prairie dog control.