

## Proposed CBJ Snow Disposal Site Mendenhall Glacier Visitor Center



## Frequently Asked Questions

### **How does CBJ dispose of Valley snow now?**

The CBJ currently disposes of snow in the tour bus parking area at the Mendenhall Glacier Visitor Center under an informal verbal agreement. The USFS notified the CBJ in 2009 that it would not be able to continue to operate the existing site without applying for a special use permit and making improvements to the site to improve treatment of runoff and minimize impacts to other users.

### **Won't the melting snow be contaminated?**

A number of pollutants are found in urban runoff and snow meltwater. The Municipality of Anchorage Watershed Management Services (WMS) staff have studied snow meltwater quality for several years and has outlined several pollutants of concern for snow disposal sites. The main pollutants are described below.

- Sediment – Sediment is a common pollutant at snow disposal sites since sand is applied to roadways for better traction during snow events.
- Chloride – Chloride is another common pollutant and usually comes from sand that is applied to the roadways (WMS Reports). Typically chloride concentrations are low at the end of a snowmelt period, but concentrations depend on factors such as snowpack chloride concentration, snowmelt rate, and snowpack height.
- Metals – Hazardous heavy metals including chromium, arsenic, copper, lead, and zinc were tested in snowpacks but they were consistently far below hazardous levels for ADEC standards (WMS).
- POLs and PAHs – POLs (petroleum/oil/lubricants) and PAHs (polynuclear aromatic hydrocarbons) were both far below hazardous levels.
- Coliform – Fecal coliform is typically low according to ADEC standards and are mostly non-human in origin. They are usually much higher in residential areas than on arterial streets.

Concentrations of pollutants in meltwater can be reduced and mitigated with proper site design, operation and maintenance. Treatment facilities can be used to retain meltwater, allowing sediment and pollutants that attach to sediment to drop out of the meltwater. The retention areas also allow for dilution of chloride concentrations, which typically peak early in the melt season. Use of booms at discharge points can reduce the potential for petroleum contaminants to leave the site.

### **How high will the snow be piled?**

The average height of snow piles at snow disposal sites is 30-50 feet. Studies in Anchorage on treating snow melt water have found that treatment for chlorides becomes much harder when snow is stacked deeper than 30 feet and there is a large spring melt. This may not be applicable in Juneau where the snow melt occurs throughout the winter.

### **Do snow disposal sites operate every day throughout the winter, or periodically?**

Snow disposal sites begin operating after each significant snowfall. Once the streets are cleared and the cul-de-sacs have been cleared, operations cease until the next significant snowfall.

### **What will the hours of operation be and how much truck traffic will be accessing the site?**

The average hours of operation for this snow disposal site would typically be from 8:00 a.m. to 4:00 p.m. On occasion there may be equipment working on the site between midnight and 8:00 am to reconfigure the snow pile, but this is rare.

### **Have all options been looked at for new snow disposal sites?**

The CBJ looked at 30 possible sites to try to identify a new snow disposal site. Few publically owned sites are available, which means that there would be a cost for acquiring a site. Most sites in the Valley either have poor access for snow hauling trucks, longer haul distances, or incompatible adjacent land uses. In addition, many of the sites identified are considered to have a higher value as potential residential development areas. The CBJ did attempt to permit a new snow disposal site on Industrial Boulevard in 2009, but agency concerns about wetland impacts resulted in that project not moving forward. As a result, the CBJ completed a Snow Management Plan in 2010 to evaluate snow management measures ity has completed a number of site selection studies identifying sites that are well suited for snow disposal. This site was identified in 1987, 1993 and 2008 site selection studies. The City looked for an alternative site in 2008, but again found this site to be best suited for this project.

### **Can't CBJ just melt the snow?**

CBJ evaluated the potential for melting snow in a Snow Management Plan in 2010. Snow melting can either be done at a stationary site or with a mobile unit. Each of these has benefits and drawbacks. Mobile snow melting eliminates the need to haul snow; this is one of the most costly portions of snow removal operations. However, mobile snow melting would require storm drain systems to accept the discharge from the melter and some type of filtering system to treat the water prior to its discharge. The Valley area does not currently have a storm drain system and the technology for treating water from mobile melters is not yet efficient. A stationary snow melting site reduces the amount of room needed for snow disposal, but still requires snow to be collected and hauled to the site. Finally, a study done by the Municipality of Anchorage found that the cost of fuel for snow melting would be too high to be financially feasible.

### **How will you mitigate for litter?**

A litter mitigation plan will be developed as part of the operations plan for the the snow disposal site. As snow melts, the litter is typically saturated with water so litter and dust do not blow from the site. An earthen berm is also placed around the site to prevent material from leaving the site as it dries. Litter is manually picked up on a regular basis during the summer months by Street Maintenance crews.

### **What difference will it make if the snow disposal site is not constructed?**

If the CBJ cannot construct a snow disposal site at the proposed site, it will need to either purchase another site in the Valley or try again to receive a wetland permit for the Industrial Boulevard site. Either of these options will result in substantially increased costs for CBJ's snow management operations.

### **What will we see from the road?**

The proposed site has a substantial amount of natural vegetation that would be maintained between the site and the road. Further evaluation of visual impacts will occur during the environmental assessment.