

WATER QUALITY COMPLAINT INSPECTION REPORT

Water Body: Wetlands and tributaries to Hammer Slough in Petersburg

Inspection Date: April 12, 2000

Report Date: April 21, 2000

Investigator: Carl Schrader

Concerns: Sediments from soil disposal site entering headwaters to Hammer Slough.

Relevant Permits: COE No.: M-960378 (Wrangell Narrows 481)

Background: I received an email on March 17 from Don Cornelius, a resident of Petersburg who was concerned that mud from a site used by the City of Petersburg to dispose of excavated soils from construction sites was overflowing the containment dike and inundating wetlands and tributaries to Hammer Slough.

The City of Petersburg has a Corps permit for disposal of soil that was recently modified (February 1999) to expand the fill area beyond the original dike. The permit is intended to give the City a place to dispose of clean overburden. The fill material is primarily muskeg, which is very similar to soils at the disposal site. The permit was certified by the DEC Certification of Reasonable Assurance (February 19, 1999) to include six conditions that were included in the COE permit. Two of the conditions are particularly relevant to this issue:

***Condition #2** requires that: Erosion and sediment control devices, such as silt fences, hay bales, sediment ponds, drainage canals, etc., shall be properly installed and maintained to filter or settle suspended sediments from all wastewater prior to its direct or indirect discharge into adjacent wetlands or water body. On a weekly basis, these devices shall be visually monitored to ensure their effectiveness. Corrective actions shall be taken as needed.*

***Condition # 4** requires that: Natural drainage and inundation patterns shall be maintained through the incorporation of appropriately sized, sloped, and spaced culverts in fill areas.*

The purpose of the inspection was to verify in particular that: 1) sediments were being effectively removed from any wastewater leaving the site; and 2) natural drainage and inundation patterns were being maintained.

Inspection Results: I inspected the site accompanied by Leo Luczak, City of Petersburg; Jim Cariello, Alaska Department of Fish & Game (Area Habitat Biologist); and Don Cornelius (citizen and retired ADFG Habitat Biologist). We inspected the site from about 12:00 – 3:00 under clear skies. Photographs were taken. From the public trail leading to a U.S. Forest Service cabin, we could see areas where the discharged soils had flowed as

a mud slide into several natural streams, blocking or diverting flows. No culverts had been installed as required by Condition #4. Considerable sediment had also flowed into an old beaver bond that was acting as a settling pond. The sediment was up to several feet deep in the forested area, and will likely result in killing many of the trees.

Please see photographs for additional information.

Findings:

- 1) Sediments were being effectively removed from wastewater prior to leaving the site (condition #2). However, the water in the settling pond within a few feet of the discharge point was very turbid. This indicates that the settling pond was barely able to effectively treat the discharge at the time of the inspection, and may not be adequate if a large amount of soil is discharged under heavy runoff conditions.
- 2) **Natural drainage and inundation patterns were not being maintained** through the incorporation of appropriately sized, sloped, and spaced culverts in fill area as required by condition #4. The applicant is in violation of Condition #4 of the COE permit.

Recommendations:

- 1) Future soil disposal on the site shall be limited **only** to areas that will not block natural drainage patterns (small streams and ponds).
- 2) Previously disposed of soils within 50 feet of ponds and natural drainages shall be stabilized using natural vegetation (typical of the site) to prevent further migration into drainages.
- 3) Timing and amount of soils disposed of at any one time shall be managed to avoid overwhelming the capacity of the settling pond.