Overflow rate = $\frac{Q}{A}$ = $\frac{gal./day}{ft^2}$
(Surface Area)

Overflow Rate = 0.7 gal/min./ft.² removes 90% of SS from cleaning wastes.

$= \frac{0.7\ gal.}{min.\ ft^2} \times \frac{60\ min.}{hr.} \times \frac{24\ hr.}{day} = 1008\ \frac{gal.}{ft.^2/day}$

3/5 of way to end.

Table 7-1 of original dev. document.

Results of pilot testing.

Table 7-2 Settling of Cleaning Water

SS Removal = 80%
Effluent = 14.7 mg/l } One hr. settling at plant scale.

Table 7-1 Settling of Cleaning Waters Removal Effic.

Quotes 4 authors
1st author did report any.
2nd author SS Removal = 88.6% 2 hr. settling
3rd author SS Removal = 78% at 60 minutes
4th author SS Removal = 97.5% SS at 30 minutes

1. Outlet 24 inch dia outlet
3 ft

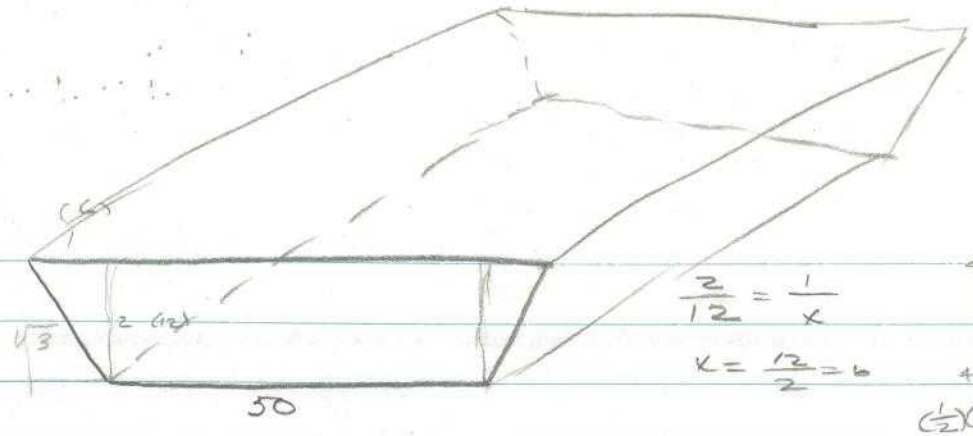
V-notch wier - will handle
3,000 gpm

6 feet long wier on top of outlet ~~structure~~. when the v notch wier is flooded.

~~This~~ was designed for just the near raceway ponds.

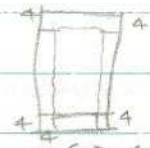
If ~~they~~ can't meet effluent ~~rqts. with this set up,~~ ~~they~~ will go to Congress for funds.

Abatement for new raceway ~~but not the old.~~



$\frac{2}{12} = \frac{1}{x}$

$x = \frac{12}{2} = 6$



$(\frac{1}{2})(8)(4)(58)(2)$

$+$

$\frac{1}{2}(8)(4)(125)(2)$

$$\text{Vol.} = 50(125)(12) + 6(12)(50) + 6(12)(125)$$
$$= 75{,}000 + 3{,}600 + 9{,}000$$
$$= 87{,}600 \text{ ft.}^3$$
$$= 87{,}600 \text{ ft.}^3 \times 7.5 \frac{\text{gal.}}{\text{ft.}^3} = 657{,}000 \text{ gal.}$$

Vol. =

$$\text{Det. Time} = \frac{657{,}000 \text{ gal.}}{6{,}000 \text{ gal/min.}} = 110 \text{ min.} = 1.8 \text{ hr.}$$

$$\text{Det. Time} = \frac{657{,}000 \text{ gal.}}{13{,}000 \text{ gal./min.}} = 51 \text{ min.} = 0.85 \text{ hr.}$$

$$\text{Det. Time} = \frac{657{,}000 \text{ gal.}}{8{,}000 \text{ gal./min.}} = 82 \text{ min.} = 1.4 \text{ hr.}$$

Assume 8 ft. depth,

$$\text{Vol.} = 50(125)8 + \tfrac{1}{2}(8)(4)(58)(2) + \tfrac{1}{2}(8)(4)(125)(2)$$
$$= 50{,}000 + 1{,}856 + 4{,}000$$
$$= 55{,}856 \text{ ft.}^3$$