

Dawn Bartel

From: Brian Helminger <brian.helminger@hvmsd.org>
Sent: Thursday, April 19, 2018 7:33 AM
To: Dave Casper
Cc: Dawn Bartel
Subject: FW: Town of Holland Sanitary District
Attachments: Projected Loadings, April 2018.pdf

Dave:

I received this a couple days ago. Please review and let me know your thoughts and if this should be put on next months agenda.

Brian

From: Chad Olsen <COlsen@mcmgrp.com>
Sent: Monday, April 16, 2018 2:27 PM
To: brian.helminger@hvmsd.org
Cc: kevin.skogman@hvmsd.org
Subject: Town of Holland Sanitary District

Brian,

The Town of Holland Sanitary District is preparing a Facilities Plan for their wastewater treatment facilities. One option being considered is pumping their wastewater to another wastewater treatment facility and abandoning their existing facility.

Year 2038 anticipated flows and loadings are attached. Please let us know if the Heart of the Valley MSD WWTF has adequate capacity to handle these loadings and if the District would be interested in discussing this further.

Please feel free to contact me to discuss.

Thank you,

Chad Olsen

Sr. Project Manager/Vice-President



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**Projected Year 2038 Loadings
No Pretreat
for the
Town of Holland Facilities Plan
April 16, 2018**

Residential Loading Assumptions

Estimated Residential Population	770
BOD per person (lbs/day)	0.17
TSS per person (lbs/day)	0.20
Max Month - Assume Ratio	1.3
Max Day - Assume Ratio	2.0

Arla Employee Loadings Assumptions

Estimated No. of Employees	215
Estimated Flow per Employee	20
Estimated BOD, mg/L	300
Estimated TSS, mg/L	300
Estimated Total P, mg/L	6

**Projected Arla Loadings
@ 45 Milbs Cheese/Year
Base**

**Arla Sanitary
Loadings**

**Commercial
Loadings**

**Residential
Loadings**

**Total
Loading**

Flow, gpd

Average					391,510
Max Month					495,210
Max Day					861,210

Biological Oxygen Demand (BOD), lbs/day

Average	2,350	11	49	131	2,541
Max Month	3,290	11	49	170	3,520
Max Day	5,875	11	49	262	6,197

Total Suspended Solids (TSS), lbs/day

Average	1,283	11	27	154	1,475
Max Month	1,797	11	27	200	2,035
Max Day	3,209	11	27	308	3,554

Total Phosphorus (P), lbs/day

Average	66	0.2	0.5	4	70
Max Month	92	0.2	0.5	5	98
Max Day	165	0.2	0.5	7	173

Commercial Loadings based on Nov-Dec 2010 Van Abel's Sampling