# LONDON, OHIO, WASTEWATER TREATMENT PLANT - STRUVITE CONTROL



Dewatering Equipment: Belt Press Issue: Struvite build-up Duration: 35 day product evaluation with a HydroFLOW device - May 11 to June 16, 2016 Objective: Struvite removal without Chemical/Manual/Mechanical assistance



STRUVITE SCALE IN AN ANAEROBIC WASTEWATER TREATMENT PLANT CAN LEAD TO GREAT INEFFICIENCY WITHIN THE PLANT OR OPERATION DUE TO CLOGGING OF THE PIPES, PUMPS AND EQUIPMENT. SOLUTIONS INCLUDE MECHANICAL AND CHEMICAL CLEANING, WHICH REQUIRE SIGNIFICANT DOWNTIME.

A CHEMICAL-FREE METHOD OF REMOVING AND PREVENTING STRUVITE HAS BEEN DEVELOPED AND TESTED SUCCESSFULLY.



1/4 INCH STRUVITE BUILD-UP INSIDE THE BELT PRESS

THIS INNOVATIVE METHOD CAN ALSO SUBSTANTIALLY LOWER POLYMER USE IN THE DEWATERING STAGE AND ASSIST IN PRODUCING DRIER CAKE.





### DRUM MAY 11, 2016



DRUM JUNE 16, 2016



#### BOTTOM ROLLER MAY 11, 2016







#### SIDE OF ROLLER MAY 11, 2016

SIDE OF ROLLER JUNE 16, 2016





#### BOTTOM BEAM MAY 11, 2016

BOTTOM BEAM JUNE 16, 2016



### REFERRAL LETTER FROM DAN LEAVITT PLANT SUPERINTENDENT



July 27, 2016

To whom it may concern,

From May 11 to June 16, 2016 we ran a 35-day product evaluation with a *Hydro*FLOW device at our anaerobic wastewater treatment plant. The goal of the product evaluation was to determine if *Hydro*FLOW can assist in slowing down the accumulation rate of struvite in our belt press, which was due for cleaning due to many years of struvite buildup. The device was installed on the 4" sludge influent iron pipe, roughly 30' before the belt press.

The HydroFLOW device not only reduced the rate of struvite accumulation, it actually started to soften-up existing deposits! Within a week, we started seeing large pieces coming off the first roller and the wash box. In addition, over half of the holes on the first roller were open. Within 35 days, a significant amount of the struvite in the belt press was removed.

We are now in the process of allocating the required funds to purchase a HydroFLOW device in order to complete the belt press cleaning process and keep it free of struvite for years to come.

I recommend HydroFLOW for struvite treatment in anaerobic wastewater treatment plants.

Sincerely,

Dan Leavit

Superintendent Phone: (740) 837-6104 Email: <u>dleavitt@rrohio.com</u>

> City of London Wastewater Department 501 South Main Street, London, Ohio 43140

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## FOR ADDITIONAL INFORMATION, PLEASE CONTACT:

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