



Proposal : Ash Grove Process System

October 29, 2022

**THIS DOCUMENT CONTAINS PROPRIETARY INFORMATION AND IS CONFIDENTIAL
Nutrient Control Systems, Inc. is pleased to present the following proposal:**

P1			
2	CRI-MAN PTS 150 18.5KW/25HP SUBMERSIBLE FEED PUMP One mounting system and one spare pump	\$16,761.00	\$33,522.00
1	PV 150 HOIST AND WINCH	\$2,447.77	\$2,447.77
1	FVC 150-200 AUTO COUPLER	\$5,205.15	\$5,205.15
2	TF 60 GUIDE TUBE	\$1,172.61	\$2,345.22
1	STAINLESS SAFTEY CHAIN SYSTEM	\$1,132.60	\$1,132.60
8	FC-26 CABLE STOPS	\$32.00	\$256.00
2	CRI-MAN TBM 100 7.5KW/10HP SUBMERSIBLE MIXERS	\$10,978.00	\$21,956.00
2	SFO 100 MIXER BRACKET	\$1,521.00	\$3,042.00
2	PVT KIT 150 MIXER HOIST AND WINCH ASSM	\$3,498.00	\$6,996.00
2	GUIDE TUBE SS	\$1,896.00	\$3,792.00
2	PT 150 SPACER	\$578.00	\$1,156.00
8	FC 20 CABLE STOPS	\$32.00	\$256.00
2	60" NCS VIBRATORY SCREENERS 2.5HP	\$38,652.00	\$77,304.00
16	14 MARKET GRADE SCREENS	\$723.00	\$11,568.00
	Note: Customer to also use 2 additional Vibratory Units provided prior by NCS		
P2			
1	FLUSH FLUME PUMP (PUMP AND CONTROLS BY CUSTOMER)	\$0.00	\$0.00
2	CRI-MAN PTS 80N 4KW/5.5HP SUBMERSIBLE CENTRIFUGE FEED PUMP One mounting system and one spare pump	\$10,673.67	\$21,347.34
1	PV 150 HOIST AND WINCH	\$2,447.77	\$2,447.77
1	FVC 80-80 AUTO COUPLER	\$1,378.15	\$1,378.15
2	TF 60 GUIDE TUBE	\$1,172.61	\$2,345.22
1	STAINLESS SAFTEY CHAIN SYSTEM	\$1,132.60	\$1,132.60
8	FC-20 CABLE STOPS	\$32.00	\$256.00
1	CRI-MAN PTS 150 18.5KW/25HP SUBMERSIBLE THINNING PUMP	\$16,761.00	\$16,761.00
1	PV 150 HHOIST AND WINCH	\$2,447.77	\$2,447.77
1	FVC 150-200 AUTO COUPLER	\$5,205.15	\$5,205.15
2	TF 60 GUIDE TUBE	\$1,172.61	\$2,345.22
1	STAINLESS SAFTEY CHAIN SYSTEM	\$1,132.60	\$1,132.60
4	FC-26 CABLE STOPS	\$32.00	\$128.00
2	CRI-MAN TBM 100 7.5KW/10HP SUBMERSIBLE MIXERS	\$10,978.00	\$21,956.00
2	SFO 100 MIXER BRACKET	\$1,521.00	\$3,042.00
2	PVT KIT 150 MIXER HOIST AND WINCH ASSM	\$3,498.00	\$6,996.00
2	GUIDE TUBE SS	\$1,896.00	\$3,792.00
2	PT 150 SPACER	\$578.00	\$1,156.00
8	FC 20 CABLE STOPS	\$32.00	\$256.00

P3

2	DIGESTER FEED PUMPS (PUMP AND CONTROLS BY CUSTOMER)	\$0.00	\$0.00
2	CRI-MAN TBM 150 15KW/20HP SUBMERSIBLE MIXERS	\$16,410.00	\$32,820.00
2	SFO 150W MIXER BRACKET	\$1,793.00	\$3,586.00
2	PVT KIT 150 MIXER HOIST AND WINCH ASSM	\$3,498.00	\$6,996.00
2	GUIDE TUBE SS	\$1,896.00	\$3,792.00
2	PT 150 SPACER	\$578.00	\$1,156.00
8	FC 26 CABLE STOPS	\$32.00	\$256.00

LIST	\$313,709.56
DISCOUNT	\$62,741.91
Sub Total 1	\$250,967.65

1	NCS DECANTER CENTRIFUGE PACKAGE	\$399,865.00
	Package to include: 518HV Decanter Centrifuge, Centrifuge Control System (Allen Bradley/ABB) to integrate into NCS thickening system. Centrifuge package is designed to process up to 100gpm @ 4%TS Input. Price includes 6 month warranty. Price includes 1 year service labor contract with monthly visits with one visit per month. Price package to include parts listed below:	

4	Guard Switches
1	50hp Motor New
1	15hp Motor New
1	RTA Rebuild kit+Balance RA
1	Gearbox Rebuild Kit
1	Feed Tube
1	V Belt 31000 100.0 OC 3 GRV
1	V Belt 3-5VX900 90.0 OC 3 GR00
2	Gasket Cover

Sub Total 1 - Pumps, Mixing, Vibratory Screen System	\$250,967.65
Sub Total 2 - Centrifuge Package	\$399,865.00
Controls Package (Allen Bradley/ABB) - Pumps, Mixing, Vibratory Screen System	\$99,583.00
Labor to Start Up - Pumps, Mixing, Vibratory Screen System	\$65,945.00
Labor to Start up - Centrifuge System	\$36,570.00
Package Total	\$852,930.65

NCS SHALL PROVIDE:

- Project drawings if requested are billed separately
- **Vibratory Screens (Must be mounted, plumbed and wired prior to NCS site arrival):**
 - Inspect wiring and phase motor from customer supplied disconnect switches.
 - Install feeding system (to customer supplied 4" plumbing drop) splash plate for screens.
 - Start up and optimize (force wheel adjustments, vibration adjustments, pump flow adjustments).
- **Pumps and Mixers (Must be mounted, plumbed and wired prior to NCS site arrival):**
 - Inspect wiring and phase motors to customer supplied disconnect switches.
- **Control Panels (Must be installed and wired prior to NCS site arrival):**
 - Labor to land in panel wiring, label signal and power wiring in control panel, final landing of motors and signal sensor circuits. Perform initial programming changes to optimize system. Test all signal and safety circuits.
- **Decanter Centrifuge (Must be mounted, plumbed and wired prior to NCS site arrival):**
 - Attach customer supplied plumbing from feed pump.
 - Start up and optimize decanter performance.
 - Labor to land in panel wiring, label signal and power wiring in control panel, final landing of motors and signal sensor circuits. Perform initial programming changes to optimize system. Test all signal and safety circuits.
- **Labor for the above tasks includes:**
 - Task A - NCS shop prep time for 11 pumps/mixers, 2 vibratory screens and 1 Decanter Centrifuge.
 - Task B - 4 days on site decanter centrifuge start up. Includes 1 Senior Controls Technician and 2 Senior Decanter Technicians.
 - Task C - 4 days on site process system controls start up. Includes 1 Senior Controls Technician and 1 NCS Senior Technician.
 - Task D - 4 days on site pump/mixer/screen start up and optimization. Includes 2 NCS technicians (1 senior, 1 junior). Tasks C and D will be done on one trip.
 - Task E - 1 return visit (3 days on site) by NCS Senior Technician post full system start up.
 - Labor outside of these tasks will be billed as follows: NCS Junior Technician (\$850/day plus expenses), NCS Senior Technician (\$1,200/day plus expenses), Senior Decanter Technician (\$1,200/day plus expenses), Senior Controls Technician (\$2,000/day plus expenses)

THE FOLLOWING SHALL BE PROVIDED BY OTHERS:

- Provide all installation, construction services, and materials (excavation, concrete, building structure, plumbing and tanks).
- Provide all electrical/plumbing materials and labor.
- Assume responsibility for all underground lines.
- Provide all electrical materials and labor for power supply / conduit and signal wiring to control panel and motors. NCS will work with customer electricians on specifications.
- Land feed power into control panels
- Install all power and signal wiring to and from control panels to main power and all motors/sensors.
- Provide equipment (Telehandler/scissor lift) to off load and position all equipment.
- Install plumbing to final connections on equipment.
- Install disconnect switches for all motors.
- Provide all conduit, boxes, and accessories for signal circuits.
- Provide a reliable Wi-Fi signal or internet connection.
- Provide handling of resultant flow liquids and solids.

Terms - Proposal - Ash Grove - 10/29/2022

1. 50% down with PO, 50% prior to shipping.
2. FOB Chambersburg, PA, 17201. Freight will be billed separately in advance of shipment.
3. Estimated lead time is 10-20 weeks from receipt of down payment to NCS and written final design approval. Note - lead times are highly variable in the current supply chain environment.
4. All equipment specified in proposal may change based on final engineering and final customer decisions.
5. Pricing estimates are valid for 15 days from date of proposal.

NOTES TO Proposal - Ash Grove

October 29, 2022

1. Any necessary permitting is the responsibility of others.
2. Professional engineering stamps are not included in the pricing.
3. Additional equipment, parts, installation materials, and services may be required that are not detailed in this equipment proposal. The customer is responsible for the cost of these additional items.
4. With manure thickening and separation, the process rate decreases as the percent solids in the influent increases. Separation efficiency is also related to general manure quality. In some cases, additional treatment steps such as bio-augmentation, aeration, chemical treatment and/or multi-stage lagoon systems must occur in order to provide sufficient influent quality.
5. The manure slurry furnished to all manure separators and thickeners must be a consistent, homogenous mix.
6. Customer assumes full responsibility in regards to mastitis, somatic cell counts, etc. and agrees to not claim any damages from NCS in regard to those issues.
7. The customer is responsible for damage due to freezing and other environmental factors.
8. Customer assumes responsibility for the thickened material and its ability to pass through pumps and the separation equipment. Certain bedding materials can impair pump and separator performance, cause increased wear and may also impact the potential dry matter of the separated solid product.
9. Total solids build up in flush flume system will impact equipment performance.
10. Recharging of the flush flume to reduce solids load will be needed periodically.
11. Warranties on all equipment with the exception of electrical controls and the centrifuge package are the prior of 24 months from installation or 28 months from shipment.
12. Control panels will be warranted for only the period of internal manufacturer component warranties.
13. Warranties are on non-wearing parts only. Labor and travel expenses will not be warranted and will be charged separately.
14. Warranty on the centrifuge is 6 months from date of start up on all parts. At the end of the 6 month warranty period, extended warranty options will be evaluated.


PROPOSAL - ASH GROVE - October 29, 2022 - SIGNATURES AND ACCEPTANCE
Both parties to sign below and initial each page.

Nutrient Control Systems, Inc.

Customer

LANTZ W. SOURBIER

print name


signature

VICE PRESIDENT

title/position

11/21/2022
date

Michael Crinion

print name


signature

Managing Partner

title/position

11.21.2022
date