

TO: BOARD OF DIRECTORS
REVIEWED: MARIO IGLESIAS *MIG*
GENERAL MANAGER
FROM: PETER V. SEVCIK, P.E. *P.V.S.*
DIRECTOR OF
ENGINEERING & OPERATIONS
DATE: AUGUST 2, 2017

**AGENDA ITEM
E-2
AUGUST 9, 2017**

**APPROVE PURCHASE OF COMPOST AERATOR, TRACK LOADER
AND AMEND FY 2017/2018 BUDGET**

ITEM

Approve purchase of compost aerator from Brown Bear Corporation in the amount of \$30,444.74, track loader from the Quinn Company in the amount of \$77,739.09 and amend FY 2017/2018 Budget [RECOMMEND BY MOTION AND ROLL CALL VOTE ADOPT RESOLUTION AUTHORIZING PURCHASE OF COMPOST AERATOR, TRACK LOADER AND BUDGET AMENDMENT].

BACKGROUND

The Nipomo Community Services District (District) operates the Southland Wastewater Treatment Facility (WWTF) west of Highway 101 on the southern edge of Nipomo. The District's upgraded WWTF began operation in March 2014 under a new permit from the Central Coast Regional Water Quality Control Board (CCRWQCB), the permitting agency that oversees wastewater plants. A requirement of this new operating permit from the CCRWQCB was that the drying beds for the biosolids (a term for the nutrient-rich organic byproduct resulting from wastewater treatment) needed to be concrete lined. This improvement reduces the risk of contaminating local groundwater. The biosolids are dried on-site in the concrete lined drying beds and ultimately hauled off-site for disposal.

The biosolids drying process at the WWTF was disrupted by all of the rain and the duration of the 2016-2017 rainy season. The WWTF has the capacity to hold a year's worth of biosolids in 12 concrete drying beds. Typically, it takes 9 to 11 weeks to dry out biosolids so that they can be hauled offsite. The District had to hold months of material waiting for the traditional warm Nipomo weather to dry this material. The warm weather came later in the year and as a consequence, the WWTF held more old biosolids than in past years resulting in odor problems for the surrounding community.

Historically, the District utilized a Cat 914 wheel loader with a conventional bucket to turn over the biosolids to facilitate the drying process. To accelerate the drying process of the inventory of older biosolids, the District leased a Brown Bear Model R24C compost aerator mounted on a CAT track loader at a cost of approximately \$2083 per week to mix and aerate the biosolids. The compost aerator introduces air into the drying biosolids, which helps to reduce odors, and also creates windrows which help to facilitate the drying process. Utilizing the equipment allowed the District to dry all eight drying beds that contained old biosolids in July and haul the material offsite for disposal. Based on the performance of the compost aerator, District staff recommends that the District purchase a similar unit and incorporate its use into the District's biosolids handling operations at the WWTF to help avoid odor problems in the future.

Initially, District staff solicited a quote from Brown Bear Corporation for a compost aerator designed to be operated by a wheel loader. Unfortunately, the hydraulic system of the District's existing wheel loader does not have sufficient capacity to operate a compost aerator and a unit with an auxiliary engine would be required at an estimated purchase price of \$150,000.

District staff then solicited a quote from Brown Bear Corporation for a compost aerator designed to be operated by a track loader. This is the same type of unit the District is currently leasing. Brown Bear provided a quote of \$30,444.74 for a Model XPR24. In accordance with the District's Purchasing Policy, non-competitive negotiations may be used to purchase the Brown Bear Corporation Compost Aerator since the item is unique and is available only from Brown Bear.

The District is a member of the National Joint Powers Alliance (NJPA), a national government purchasing cooperative, which provides the District the opportunity to purchase through nationally bid contracts. The District has purchased several generators and other equipment over the last few years through a NJPA vendor at a considerable cost savings to the District. A current NJPA equipment vendor is Caterpillar Corporation and the local representative is the Quinn Company. District staff solicited a proposal from the Quinn Company for a track loader. Quinn provided a NJPA quote of \$77,739.09 for a Caterpillar Model 279D Track Loader.

Lead time on both pieces of equipment is approximately 45 days. Subject to Board approval, District staff would like to order the equipment as soon as possible so that delivery occurs prior to the expiration of the 12 week lease period for the borrowed equipment.

FISCAL IMPACT

The approved FY 17-18 budget does not include funding for a compost aerator as the need for the equipment was not identified until recently. A budget adjustment in the amount of \$108,184 from Town Sewer Fund #810 Funded Replacement Reserves is needed to provide funding for the purchase.

STRATEGIC PLAN

Goal 2. FACILITIES THAT ARE RELIABLE, ENVIRONMENTALLY SENSIBLE AND EFFICIENT. Plan, provide for and maintain District facilities and other physical assets to achieve reliable, environmentally sensible, and efficient District operations.

RECOMMENDATION

Staff recommends that the Board, by motion and roll call vote, adopt a resolution authorizing purchase of a Brown Bear Model XPR24 Compost Aerator from the Brown Bear Corporation in the amount of \$30,444.74, purchase of a Caterpillar Model 279D Track Loader from the Quinn Company in the amount of \$77,739.09 and approving a budget amendment transferring \$108,184 from Town Sewer Fund #810 Funded Replacement Reserves to Town Sewer Fund #130 Fixed Asset Purchases.

ATTACHMENTS

- A. Resolution 2016-XXXX Compost Aerator
- B. Brown Bear Compost Aerator Information
- C. CAT Model 279D Information

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ATTACHMENT A

**NIPOMO COMMUNITY SERVICES DISTRICT
RESOLUTION NO. 2017-XXXX**

**A RESOLUTION OF THE BOARD OF DIRECTORS OF THE NIPOMO COMMUNITY SERVICES
DISTRICT AUTHORIZING PURCHASE OF COMPOST AERATOR FROM BROWN BEAR
CORPORATION, PURCHASE OF TRACK LOADER FROM QUINN COMPANY AND AMENDING
FY 2017/18 BUDGET**

WHEREAS, the District's upgraded Southland Wastewater Treatment Facility (WWTF) generates biosolids as part of the wastewater treatment process; and

WHEREAS, to facilitate the drying process and reduce the potential for odor, it is necessary to aerate and mix the biosolids within drying beds and the wheel loader the District is currently using to perform this work has proven to be inefficient and ineffective during wet weather periods; and

WHEREAS, based on the performance of a leased compost aerator, District staff recommends that the District purchase a similar unit and incorporate its use into the District's biosolids handling operations at the WWTF to facilitate drying of biosolids and help avoid odor problems in the future; and

WHEREAS, the District's Purchasing Policy allows the use of non-competitive negotiations to purchase unique items where the purchase price is reasonable and the product is the only one that will properly meet the needs of the NCS D because the item is unique and is available only from a sole source; and

WHEREAS, District staff obtained a quote for a Brown Bear Model XPR-24 Compost Aerator from Brown Bear Corporation in the amount of \$30,444.74; and

WHEREAS, the Brown Bear Model XPR-24 Compost Aerator is unique and is available only from Brown Bear Corporation and the purchase price is reasonable; and

WHEREAS, the District is a member of the National Joint Powers Alliance (NJPA), a national government purchasing cooperative, which provides the District the opportunity to purchase through nationally bid contracts; and

WHEREAS, District staff obtained a NJPA quote for a Caterpillar Model 279D track loader from the Quinn Company in the amount of \$77,739.09; and

WHEREAS, Section 8.3.30.D of the District's Purchasing Policy allows the Board to approve the purchase of equipment through an alternative procedure by accepting a proposal submitted by a vendor to another agency for similar equipment where the other agency's procedures for the purchase were substantially similar to those otherwise required by the District's Purchasing Policy, the equipment to be purchased by the District is substantially similar to the equipment purchased by the other agency so that the submitted proposal would be responsive to the NCS D's specifications, and the negotiations regarding the purchase are minor and the proposed purchase is consistent with the policy of awarding the contract to the most responsive vendor with the consideration of price and delivery date; and

WHEREAS, the NJPA quote from Quinn Company for the Caterpillar Model 279 D track loader meets the requirements of Section 8.3.30.D of the District's Purchasing Policy.

**NIPOMO COMMUNITY SERVICES DISTRICT
RESOLUTION NO. 2017-XXXX**

**A RESOLUTION OF THE BOARD OF DIRECTORS OF THE NIPOMO COMMUNITY SERVICES
DISTRICT AUTHORIZING PURCHASE OF COMPOST AERATOR FROM BROWN BEAR
CORPORATION, PURCHASE OF TRACK LOADER FROM QUINN COMPANY AND AMENDING
FY 2017/18 BUDGET**

**NOW THEREFORE, BE IT RESOLVED, DETERMINED AND ORDERED BY THE NIPOMO
COMMUNITY SERVICES DISTRICT BOARD OF DIRECTORS AS FOLLOWS:**

- 1) The above recitals are true and correct and constitute findings for (1) the sole source purchase of the Brown Bear Compost Aerator from the Brown Bear Corporation and (2) the purchase of the CAT track loader from Quinn Corporation pursuant to the alternative procedures allowed under Section 8.3.30.D of the District's Purchase Policies and Procedures.
- 2) The Board of Directors does hereby authorize a budget amendment and transfer in the amount of \$108,184 from Town Sewer Fund #810 Funded Replacement reserves to Town Sewer Fund #130 Fixed Asset Purchases.
- 3) The Board of Directors does hereby approve the purchase of a compost aerator from the Brown Bear Corporation in the amount of \$30,444.74.
- 4) The District Board of Directors does hereby approve the purchase of a track loader from the Quinn Company in the amount of \$77,739.09.

On the motion of Director _____, seconded by Director _____, and on the following roll call vote, to wit:

**AYES:
NOES:
ABSENT:
CONFLICTS:**

The foregoing resolution is hereby adopted this 9th day of August 2017.

DAN ALLEN GADDIS
President, Board of Directors

ATTEST:

APPROVED AS TO FORM
AND LEGAL EFFECT:

MARIO IGLESIAS
General Manager and Secretary to the Board

WHITNEY G. McDONALD
District Legal Counsel

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ATTACHMENT B



XPR24-8' Compost Aerator for High Flow Skidsteer and Compact Track Loaders



- For use with compost, wastewater & potable water sludges, and bioremediation of soils
- For skid steer & compact track loaders with high flow option over 3000psi & 30 GPM
- Flow ratings of 30-45 gallons per minute up to 4500 PSI
- Two drive motor sizes, 29 cubic inch & 41 cubic inch to select from
- Eaton direct drive hydraulic motor with 2.25" diameter drive shaft
- Left Hand discharge standard
- 24" diameter x 8' wide rotor
- App 1400lbs (varies with options selected)
- Multiple options available to fit your specific application
- Sawtooth paddle, or smooth paddle, or continuous screw auger with bolt on replaceable wear elements
- Full length bolt on replaceable skid shoe and crumbing blade

Brown Bear Corporation

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<https://www.youtube.com/c/Brownbearcorp.com>

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ATTACHMENT C



Cat[®] 279D

COMPACT TRACK LOADER

FEATURES:

The Cat[®] 279D Compact Track Loader, with its radial lift design, delivers impressive mid-lift reach and excellent digging performance with outstanding drawbar power. Its standard, suspended undercarriage system provides superior traction, flotation, stability and speed to work in a wide range of applications and underfoot conditions. The 279D features the following:

- **Industry leading sealed and pressurized cab option** provides a cleaner and quieter operating environment with excellent work tool visibility.
- **Available high-back, heated, air ride seat with seat mounted adjustable joystick controls** makes the D Series the industry leader in operator comfort.
- **High performance power train** provides maximum performance and production capability through the Electronic Torque Management system, standard two speed travel and an electronic hand/foot throttle with decel pedal capability.
- **High Flow XPS hydraulic system** is available for applications that demand maximum hydraulic work tool performance.
- **Electronically controlled Cat C3.3B engine** provides high horsepower and torque while meeting U.S. EPA Tier 4 Final (EU Stage IIIB) emission standards.
- **Cat "Intelligent Leveling" system (ILEV)** provides industry leading technology, integration and optional features such as dual direction self level, work tool return to dig and work tool positioner.
- **Standard fully independent torsion axle suspension** combined with the optional Speed Sensitive Ride Control system improves operation on rough terrain, enabling better load retention, increased productivity and greater operator comfort.
- **Maximize machine capability and control** with optional Advanced Display providing on-screen adjustments for implement response, hystat response and creep control. Also features multi-language functionality with customizable layouts, security system and rearview camera.
- **Ground level access** to all daily service and routine maintenance points helps reduce machine downtime for greater productivity.
- **Broad range of performance matched Cat Work Tools** make the Cat Compact Track Loader the most versatile machine on the job site.

Specifications

Engine

Engine Model	Cat C3.3B DIT (turbo)	
Gross Power SAE J1995	55.4 kW	74.3 hp
Net Power SAE 1349	54.4 kW	72.9 hp
Net Power ISO 9249	54.9 kW	73.7 hp
Peak Torque at 1,500 rpm SAE J1995	265 N-m	195 lbf-ft
Displacement	3.3 L	203 in ³
Stroke	120 mm	4.7 in
Bore	94 mm	3.7 in

Weights*

Operating Weight	4487 kg	9,893 lb
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Power Train

Travel Speed (Forward or Reverse):		
One Speed	7.2 km/h	4.5 mph
Two Speed	11.3 km/h	7.0 mph

*Operating Weight, Operating Specifications and Dimensions all based on 75 kg (165 lb) operator, all fluids, two speed, OROPS, 1981 mm (78 in) dirt bucket, 400 mm (15.7 in) tracks, dual flange front idler/single flange rear idler, standard flow hydraulics, mechanical suspension seat, no optional counterweights and manual quick coupler (unless otherwise noted).

Hydraulic System

Hydraulic Flow – Standard:			
Loader Hydraulic Pressure	23 000 kPa	3,335 psi	
Loader Hydraulic Flow	86 L/min	23 gal/min	
Hydraulic Power (calculated)	33 kW	44 hp	
Hydraulic Flow – High Flow XPS:			
Maximum Loader Hydraulic Pressure	28 000 kPa	4,061 psi	
Maximum Loader Hydraulic Flow	121 L/min	32 gal/min	
Hydraulic Power (calculated)	57 kW	76 hp	

Operating Specifications*

Rated Operating Capacity:			
35% Tipping Load	932 kg	2,055 lb	
50% Tipping Load	1331 kg	2,935 lb	
Rated Operating Capacity with Optional Counterweight			
Tipping Load	1444 kg	3,185 lb	
Breakout Force, Tilt Cylinder	2663 kg	5,870 lb	
Ground Contact Area (400 mm/15.7 in track)	3304 kg	7,285 lb	
Ground Contact Area (450 mm/17.7 in track)	1.30 m ²	2,015 in ²	
Ground Contact Area (450 mm/17.7 in track)	1.47 m ²	2,272 in ²	
Ground Pressure (400 mm/15.7 in track)	33.9 kPa	4.9 psi	
Ground Pressure (450 mm/17.7 in track)	30.0 kPa	4.4 psi	

