

ADDENDUM NUMBER 6

FOR THE

CITY OF CORCORAN

**2020 WASTEWATER TREATMENT PLANT
MODIFICATIONS**

February 22, 2021




OWNER:
City of Corcoran
832 Whitley Avenue
Corcoran, CA 93212

PREPARED BY:
A&M
220 N Locust Street
Visalia, CA 93291

The following additions, deletions, or modifications shall become part of the Contract Documents for the City of Corcoran 2020 Wastewater Treatment Plant Modifications project:

Include response memorandum documents from W3i Engineering dated January 28, 2021 with subjects as follows: “Bioworks Proposal to be Considered Equal for Section 46 63 65” & “Gardner Denver Blower Proposal to be Considered Equal for Section 43 11 33”.

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Prepared by:  February 22, 2021
Orfil Muniz, P.E. Date
A&M Consulting Engineers

Accepted by: _____
Contractor (signature) Date

Memorandum

To: Joe Faulkner, Orfil Muniz P.E.

From: Terry Schroepfer, P.E.

January 28, 2021

Subject: Gardner Denver Blower Proposal to be Considered Equal for Section 43 11 33

I have reviewed material submitted by Jeff Frey of Envirotrol. via email dated 1/26/21. for a pre bid approval of a Gardner Denver blower package.

Based on my review of the material submitted, I find that the submittal is incomplete and therefore cannot be approved at this time. Further, based on information received, the system does not meet the project technical specifications in the following ways:

1. The proposed inlet air flow is less than that specified in 2.02.
2. The proposed connection size is 8 inch vs. 10 inch specified.
3. The stated brake horsepower max is greater than that specified (2.02) implying a lower efficiency. The package BHP is to include inlet filter/silencer and outlet silencer, and check valve. It is not clear from the submittal if this is accounted for in the discharge pressure.
4. There are differences in technical details that may be ok. However, there is no point by point comparison to the specified blower that can be used to evaluate the merits of the differences.
5. There is no free field noise guarantee for the package stated in the submittal.

To receive approval, the submittal must be modified to correct the items above and provide a point by point comparison to the technical specifications.

The manufacturer shall also confirm that the frame and enclosure can be retrofitted to increase capacity by 25% greater than the current design.

Memorandum

To: Joe Faulkner, Orfil Muniz P.E.

From: Terry Schroepfer, P.E.

January 28, 2021

Subject: Bioworks Proposal to be Considered Equal for Section 46 63 65

I have reviewed material submitted by Dave Gibson, Bioworks North America via email dated 1/25/21.

Based on my review of the material submitted, I find that the Bioworks system does not meet the requirements of the Technical Specifications and therefore cannot be considered an "equal" to the system specified.

Some of the key considerations of the review are:

1. Bioworks does not provide a list of 4 installations completed within the last five years. Only one of four facilities listed was installed in the last five years. (1.2)
Only one facility was listed in California. The absence of significant experience, especially in California, is a concern and is considered disqualifying.
2. No operating data was included in the submittal as required by 1.2.3b. Only generalized data was provided.
3. The submittal did not demonstrate how the system capacity could be increased by 25% by adding additional diffuser(s). (1.2)
4. There were no certified test results showing mixing capability at 4 scfm/1000 cf of basin capacity. (8)
5. Head loss calculations were not provided. (10)
6. Bioworks cannot provide the specified floating maintenance platform. They have a system for "floating" the diffusers to the surface for retrieval. However, it appears that a floating platform will still be needed to retrieve and repair the diffuser assemblies. There was insufficient information to determine how the floating retrieval system works. It is unclear if they proposed to provide the

system. It appears some electrical connection would be required and there are no project provisions for providing an electrical connection to the headers. (2.3)

7. The specifications do not allow for silicon diffuser membranes. (2.2G)
8. There are other differences in the Bioworks equipment that are different than that specified. However, with more detail, it is possible that these variations are not of significant consequence and could be acceptable.