

CITY OF ESCONDIDO PUBLIC SERVICES AGREEMENT

This Public Services Agreement ("Agreement") is made and entered into as of this _____ day

of	, 2022 ("Effective Date"),		
	Between:	CITY OF ESCONDIDO a California municipal corporation 201 N. Broadway Escondido, CA 92025 Attn: Kyle Morgan 760-839-6290, ext. 7017 ("CITY")	
	And:	Shaen and Betty Magan dba Tule Ranch, dba Western Express Transporter's, Inc, a California corporation, dba AgTech LLC, an Arizona limited liability company 4324 E. Ashlan Ave. Fresno, CA 93726 Attn: Cal Mullenix	

(The CITY and CONTRACTOR each may be referred to herein as a "Party" and collectively as the "Parties.")

602-377-7250 ("CONTRACTOR").

WHEREAS, the Parties desire to enter into this Agreement for the performance of the Services described herein.

NOW, THEREFORE, in consideration of the mutual covenants, promises, terms, and conditions set forth herein, and the mutual benefits derived therefrom, the Parties hereby agree as follows:

- 1. <u>Description of Services</u>. CONTRACTOR shall furnish all of the Services described in the Scope of Work, which is attached to this Agreement as <u>Attachment "A"</u> and incorporated herein by this reference ("Services").
- 2. <u>Compensation</u>. In exchange for CONTRACTOR's completion of the Services, the CITY shall pay, and CONTRACTOR shall accept in full, an amount not to exceed the sum of \$695,000. CONTRACTOR shall be compensated only for performance of the Services described in this Agreement. No compensation shall be provided for any other work or services without the CITY's prior written consent. If this Agreement is amended at any time, additional compensation of CONTRACTOR contained in any subsequent amendments shall not exceed a cumulative total of 25% of the maximum payment provided for in this Section 2, unless approved by resolution of the

City Council.

- 3. <u>Performance</u>. CONTRACTOR shall faithfully perform the Services in a proficient manner, to the satisfaction of the CITY, and in accord with the terms of this Agreement. CONTRACTOR shall be responsible for the professional quality, technical accuracy, timely completion, and coordination of all reports and other information furnished by CONTRACTOR pursuant to this Agreement, except that CONTRACTOR shall not be responsible for the accuracy of information supplied by the CITY.
- 4. <u>Termination</u>. The Parties may mutually terminate this Agreement through a writing signed by both Parties. The CITY may terminate this Agreement for any reason upon providing CONTRACTOR with 10 days' advance written notice. CONTRACTOR agrees to cease all work under this Agreement on or before the effective date of any notice of termination. If the CITY terminates this Agreement due to no fault or failure of performance by CONTRACTOR, then CONTRACTOR shall be compensated based on the work satisfactorily performed at the time of such termination. In no event shall CONTRACTOR be entitled to receive more than the amount that would be paid to CONTRACTOR for the full performance of the Services.
- City Property. All original documents, drawings, electronic media, and other materials prepared by CONTRACTOR pursuant to this Agreement immediately become the exclusive property of the CITY, and shall not be used by CONTRACTOR for any other purpose without the CITY's prior written consent.

6. Insurance Requirements.

- a. CONTRACTOR shall procure and maintain, at its own cost, during the entire term of this Agreement, insurance against claims for injuries to persons or damages to property that may arise from or in connection with the performance of the Services, and the results of such work, by CONTRACTOR, its agents, representatives, employees, or subcontractors. Insurance coverage shall be at least as broad as the following:
 - (1) Commercial General Liability. Insurance Services Office ("ISO") Form CG 00 01 covering Commercial General Liability on an "occurrence" basis, including products and completed operations, property damage, bodily injury, and personal & advertising injury, with limits no less than \$2,000,000 per occurrence and \$4,000,000 general aggregate.
 - (2) Automobile Liability. ISO Form CA 00 01 covering any auto (Code 1), or if CONTRACTOR has no owned autos, hired (Code 8) and non-owned autos (Code 9), with limits no less than \$1,000,000 per accident for bodily injury and property damage, unless waived by the CITY and approved in writing by the CITY's Risk and Safety Division.
 - (3) Workers' Compensation. Worker's Compensation as required by the State of California, with Statutory Limits, and Employer's Liability Insurance with limits of no less than \$1,000,000 per accident for bodily injury or disease.
 - (4) Contractors Pollution Liability. Contracts Pollution Liability insurance applicable to work being performed, with a limit no less than \$2,000,000 per claim and \$2,000,000 aggregate per policy period of one year.
 - (5) If CONTRACTOR maintains broader coverage and/or higher limits than the minimums otherwise required by this Agreement, the CITY requires and shall be entitled to the broader coverage and/or the higher limits maintained by CONTRACTOR.
- b. Each insurance policy required by this Agreement must be acceptable to the City Attorney and shall meet the following requirements:
 - (1) Acceptability of Insurers. Insurance coverage must be provided by an insurer authorized to conduct business in the state of California with a current A.M. Best's rating of no less than A-: FSC VII, or as approved by the CITY.

- (2) Additional Insured Status. Both the Commercial General Liability, the Automobile Liability, and the Contractors Pollution Liability policies must name the CITY (including its officials, officers, agents, employees, and volunteers) specifically as an additional insured under the policy on a separate endorsement page. The Commercial General Liability additional insured endorsement shall be at least as broad as ISO Form CG 20 10 11 85, or if not available, through the addition of both CG 20 10, CG 20 26, CG 20 33, or CG 20 38, and CG 20 37 if a later edition is used. The Automobile Liability endorsement shall be at least as broad as ISO Form CA 20 01.
- (3) Transportation Pollution Liability Endorsement. The Automobile Liability policy shall be endorsed to include Transportation Pollution Liability insurance, covering materials to be transported by Contractor pursuant to the contract. This coverage may also be provided on the Contractors Pollution Liability policy.
- (4) Primary Coverage. CONTRACTOR's insurance coverage shall be primary coverage at least as broad as ISO CG 20 01 04 13 with respect to the CITY, its officials, officers, agents, employees, and volunteers. Any insurance or self-insurance maintained by the CITY, its officials, officers, agents, employees, or volunteers shall be in excess of CONTRACTOR's insurance and shall not contribute with it.
- (5) Notice of Cancellation. Each insurance policy shall provide that coverage shall not be canceled, except with prior written notice to the CITY.
- (6) Subcontractors. If applicable, CONTRACTOR shall require and verify that all subcontractors maintain insurance meeting all the requirements stated in this Agreement, and CONTRACTOR shall ensure that the CITY (including its officials, officers, agents, employees, and volunteers) is an additional insured on any insurance required from a subcontractor.
- (7) Waiver of Subrogation. CONTRACTOR hereby grants to the CITY a waiver of any right to subrogation that any insurer of CONTRACTOR may acquire against the CITY by virtue of the payment of any loss under such insurance. CONTRACTOR agrees to obtain any endorsement that may be necessary to affect this waiver of subrogation, but this subsection shall apply regardless of whether or not the CITY has received a waiver of subrogation endorsement from the insurer. Any Workers' Compensation policy required by this Agreement shall be endorsed with a waiver of subrogation in favor of the CITY for all work performed by the CONTRACTOR, its agents, representatives, employees and subcontractors.
- (8) Self-Insurance. CONTRACTOR may, with the CITY's prior written consent, fulfill some or all of the insurance requirements contained in this Agreement under a plan of selfinsurance. CONTRACTOR shall only be permitted to utilize such self-insurance if, in the opinion of the CITY, CONTRACTOR's (i) net worth and (ii) reserves for payment of claims of liability against CONTRACTOR are sufficient to adequately compensate for the lack of other insurance coverage required by this Agreement. CONTRACTOR's utilization of selfinsurance shall not in any way limit the liabilities assumed by CONTRACTOR pursuant to this Agreement.
- (9) Self-Insured Retentions. Self-insured retentions must be declared to and approved by the CITY.
- c. Verification of Coverage. At the time CONTRACTOR executes this Agreement, CONTRACTOR shall provide the CITY with original Certificates of Insurance including all required amendatory endorsements (or copies of the applicable policy language effecting the insurance coverage required by this Agreement), which shall meet all requirements under this Agreement. The CITY reserves the right to require complete, certified copies of all required insurance policies, including endorsements required by this Agreement, at any time.

- d. Special Risks or Circumstances. The CITY reserves the right, at any point during the term of this Agreement, to modify the insurance requirements in this Agreement, including limits, based on the nature of the risk, prior experience, insurer, coverage, or other special circumstances.
- e. No Limitation of Obligations. The insurance requirements in this Agreement, including the types and limits of insurance coverage CONTRACTOR must maintain, and any approval of such insurance by the CITY, are not intended to and shall not in any manner limit or qualify the liabilities and obligations otherwise assumed by CONTRACTOR pursuant to this Agreement, including but not limited to any provisions in this Agreement concerning indemnification.
- f. Failure to comply with any of the insurance requirements in this Agreement, including but not limited to a lapse in any required insurance coverage during the term of this Agreement, shall be a material breach of this Agreement. In the event that CONTRACTOR fails to comply with any such insurance requirements in this Agreement, in addition to any other remedies the CITY may have, the CITY may, at its sole option, (i) immediately terminate this Agreement; or (ii) order CONTRACTOR to stop work under this Agreement and/or withhold any payment that becomes due to CONTRACTOR until CONTRACTOR demonstrates compliance with the insurance requirements in this Agreement.

7. Indemnification, Duty to Defend, and Hold Harmless.

- a. CONTRACTOR (including CONTRACTOR's agents, employees, and subcontractors, if any) shall indemnify, defend, and hold harmless the CITY, its officials, officers, agents, employees, and volunteers from and against any and all claims, demands, actions, causes of action, proceedings (including but not limited to legal and administrative proceedings of any kind), suits, fines, penalties, judgments, orders, levies, costs, expenses, liabilities, losses, damages, or injuries, in law or equity, including without limitation the payment of all consequential damages and attorney's fees and other related litigation costs and expenses (collectively, "Claims"), of every nature caused by, arising out of, or in connection with CONTRACTOR's performance of the Services or its failure to comply with any of its obligations contained in this Agreement, except where caused by the sole negligence or willful misconduct of the CITY.
- b. CONTRACTOR (including CONTRACTOR's agents, employees, and subcontractors, if any) shall defend, indemnify, and hold harmless the CITY, its officials, officers, agents, employees, and volunteers from and against any and all Claims caused by, arising under, or resulting from any violation, or claim of violation, of the San Diego Municipal Storm Water Permit (Order No. R9-2013-0001, as amended) of the California Regional Water Quality Control Board, Region 9, San Diego, that the CITY might suffer, incur, or become subject to by reason of, or occurring as a result of, or allegedly caused by, any work performed pursuant to this Agreement.
- c. All terms and provisions within this Section 7 shall survive the termination of this Agreement.
- 8. <u>Anti-Assignment Clause</u>. Because the CITY has relied on the particular skills of CONTRACTOR in entering into this Agreement, CONTRACTOR shall not assign, delegate, subcontract, or otherwise transfer any duty or right under this Agreement, including as to any portion of the Services, without the CITY's prior written consent. Any purported assignment, delegation, subcontract, or other transfer made without the CITY's consent shall be void and ineffective. Unless CONTRACTOR assigns this entire Agreement, including all rights and duties herein, to a third party with the CITY's prior written consent, CONTRACTOR shall be the sole payee under this Agreement. Any and all payments made pursuant to the terms of this Agreement are otherwise not assignable.
- 9. <u>Attorney's Fees and Costs</u>. In any action to enforce the terms and conditions of this Agreement, the prevailing Party shall be entitled to reasonable attorney's fees and costs.
- Independent Contractor. CONTRACTOR is an independent contractor, and no agency or employment relationship is created by the execution of this Agreement.

- 11. <u>Amendment</u>. This Agreement shall not be amended except in a writing signed by the CITY and CONTRACTOR.
- 12. Merger Clause. This Agreement, together with its attachments or other documents described or incorporated herein, if any, constitutes the entire agreement and understanding of the CITY and CONTRACTOR concerning the subject of this Agreement and supersedes and replaces all prior negotiations, understandings, or proposed agreements, written or oral, except as otherwise provided herein. In the event of any conflict between the provisions of this Agreement and any of its attachments or related documents, if any, the provisions of this Agreement shall prevail.
- 13. <u>Anti-Waiver Clause</u>. None of the provisions of this Agreement shall be waived by the CITY because of previous failure to insist upon strict performance, nor shall any provision be waived because any other provision has been waived by the CITY, in whole or in part.
- 14. <u>Severability</u>. This Agreement shall be performed and shall be enforceable to the full extent allowed by applicable law, and the illegality, invalidity, waiver, or unenforceability of any provision of this Agreement shall not affect the legality, validity, applicability, or enforceability of the remaining provisions of this Agreement.
- 15. <u>Governing Law</u>. This Agreement and all rights and obligations arising out of it shall be construed in accordance with the laws of the State of California. Venue for any action arising from this Agreement shall be conducted only in the state or federal courts of San Diego County, California.
- 16. <u>Counterparts</u>. This Agreement may be executed on separate counterparts, each of which shall be an original and all of which taken together shall constitute one and the same instrument. Delivery of an executed signature page of this Agreement by electronic means, including an attachment to an email, shall be effective as delivery of an executed original. The Agreement on file with the City is the copy of the Agreement that shall take precedence if any differences exist between or among copies or counterparts of the Agreement.
- 17. <u>Provisions Cumulative</u>. The foregoing provisions are cumulative to, in addition to, and not in limitation of any other rights or remedies available to the CITY.
- 18. <u>Notice</u>. Any statements, communications, or notices to be provided pursuant to this Agreement shall be sent to the attention of the persons indicated herein, and the CITY and CONTRACTOR shall promptly provide the other Party with notice of any changes to such contact information.
- Business License. CONTRACTOR shall obtain a City of Escondido Business License prior to execution of this Agreement and shall maintain such Business License throughout the term of this Agreement.
- 20. Compliance with Laws, Permits, and Licenses. CONTRACTOR shall keep itself informed of and comply with all applicable federal, state, and local laws, statutes, codes, ordinances, regulations, rules, and other legal requirements in effect during the term of this Agreement. CONTRACTOR shall obtain any and all permits, licenses, and other authorizations necessary to perform the Services. Neither the CITY, nor any elected or appointed boards, officers, officials, employees, or agents of the CITY, shall be liable, at law or in equity, as a result of any failure of CONTRACTOR to comply with this section.
- 21. Prevailing Wages. If applicable, pursuant to California Labor Code section 1770 et seq., CONTRACTOR agrees that a prevailing rate and scale of wages, in accordance with applicable laws, shall be paid in performing this Agreement. CONTRACTOR shall keep itself informed of and comply with all applicable federal, state, and local laws, statutes, codes, ordinances, regulations, rules, and other legal requirements pertaining to the payment of prevailing wages. The prevailing rate and scale to be paid shall be the same as the applicable "General Prevailing Wage Determination" approved by the Department of Industrial Relations as of the Effective Date of this

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Agreement, which are available online at http://www.dir.ca.gov/oprl/dprewagedetermination.htm and incorporated into this Agreement by this reference. Neither the CITY, nor any elected or appointed boards, officers, officials, employees, or agents of the CITY, shall be liable, at law or in equity, as a result of any failure of CONTRACTOR to comply with this section.

- 22. Immigration Reform and Control Act of 1986. CONTRACTOR shall keep itself informed of and shall comply with the Immigration Reform and Control Act of 1986 ("IRCA"). CONTRACTOR represents and warrants that all of its employees and the employees of any subcontractor retained by CONTRACTOR who perform any of the Services under this Agreement, are and will be authorized to perform the Services in full compliance with the IRCA. CONTRACTOR affirms that as a licensed contractor and employer in the State of California, all new employees must produce proof of eligibility to work in the United States within the first three days of employment and that only employees legally eligible to work in the United States will perform the Services. CONTRACTOR agrees to comply with the IRCA before commencing any Services, and continuously throughout the performance of the Services and the term of this Agreement.
- 23. <u>Effective Date</u>. Unless a different date is provided in this Agreement, the effective date of this Agreement shall be the latest date of execution set forth by the names of the signatories below.

(Signature Page Follows)

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IN WITNESS WHEREOF, this Agreement is executed by the Parties or their duly authorized representatives as of the Effective Date:

	CITY OF ESCONDIDO
Date:	Paul McNamara Mayor
	Shaen and Betty Magan dba Tule Ranch, dba Western Express Transporter's, Inc a California corporation, dba AgTech LLC, an Arizona limited liability company
Date:	Signature
	Name and Title (please print)
	Shaen and Betty Magan dba Tule Ranch, dba Western Express Transporter's, Inc a California corporation, dba AgTech LLC, an Arizona limited liability company
Date:	Signature
	Name and Title (please print)
APPROVED AS TO FORM: OFFICE OF THE CITY ATTORNEY MICHAEL R. MCGUINNESS, CITY ATTORNEY	
BY:	

THE CITY OF ESCONDIDO DOES NOT DISCRIMINATE AGAINST QUALIFIED PERSONS WITH DISABILITIES.

ATTACHMENT "A"

Scope of Work

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A. General

Shaen Magan and Betty Magan, dba Tule Ranch, dba Western Express Transporter's Inc., a California corporation, dba AgTech LLA, an Arizona limited liability company ("Contractor"), will provide the City of Escondido, a California municipal corporation ("City"), with hauling and beneficial use of biosolids ("Project").

B. Location

Contractor will provide services at the City's Hale Avenue Resource Recovery Facility located at 1521 S. Hale Ave., Escondido, CA 92029 ("HARRF").

C. Services

Contractor shall provide services as more particularly described in pertinent excerpts from Contractor's proposal, which are attached to this Scope of Work as Exhibit 1 and incorporated by this reference. In the event of any conflict between the terms of Exhibit 1 and this Agreement or this Scope of Work, the terms of this Agreement and Scope of Work shall prevail.

In preparation for pick-up by the Contractor, City staff will load biosolids into provided trailers and weigh each loaded trailer. The City's scale is not a certified scale. As such, the Contractor will be required to provide a certified weight ticket for each trailer load. City staff will stage full trailers for pick-up by the Contractor. Pick-ups and deliveries shall be completed seven days a week, or as necessary between the hours of 7 a.m. and 6 p.m.

The scope of services for this project shall generally include:

- 1. Provision of certified weight ticket for each trailer load;
- 2. Transportation of biosolids in watertight trailers, with retractable, intact tarp covers:
- 3. Removal of loaded trailers from the HARRF within 24 hours of staging;
- 4. Provision of additional trailers, as required on a short-term basis, to accommodate increased biosolids quantities; and
- Maintenance of all contractor provided equipment, tractors and trailers such that the contractor provided equipment is: in sound working condition; meets all applicable California Department of Transportation safety requirements; and is California emissions compliant.

D. Scheduling

Contractor to schedule dates of work in advance by contacting the HARRF Duty Operator at 760-535-2151 or by emailing Scott Birchett at sbirchett@escondido.org. Work shall be performed between the hours of 7 a.m. and 6 p.m., seven days a week.

E. Contract Price and Payment Terms

The contract price of this Agreement shall not exceed **\$695,000** for hauling and beneficial use of biosolids. The contract price includes all labor, materials, equipment, and transportation required to perform the work. Services will be billed as services are performed. Payment will be made after services have been performed and within 30 days of receipt of an invoice for those services.

The rate per WET TON of "Class B" Biosolids shall be \$49.65.

ATTACHMENT "A"

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The City shall pay fuel surcharges associated with services provided under this Agreement in the event that California's base fuel price rises above \$4.803 per gallon. Any fuel surcharges in excess of \$4.803 must be included in a separate line of each applicable invoice submitted by Contractor to the City for payment.

Scope of Work

F. Term

The term of this Agreement shall be for a period of **three years** commencing on the Effective Date of this Agreement. The term of this Agreement shall include two additional one-year options to extend. If the City elects, in its sole discretion, to exercise one or both of the one-year options to extend, such extensions must be completed within the proceeding term via an amendment pursuant to Section 11 of the Agreement.

G. Other

- 1. Biosolids transported from the HARRF are required to:
 - a. be processed and land applied; or
 - b. be directly land applied; or
 - c. be off loaded at a landfill; or
 - d. be delivered to a subcontractor for composting in accordance with local ordinances.
- 2. End-use sites are specifically permitted for the uses described above.
- 3. Random inspections of the end-use sites are executed with or without notice by the generators, health offices, regulators, contractors, and auditors for verification that the above requirements are being met.
- 4. Biosolids are regulated through the Code of Federal Regulations, Section 40, Part 503 (40 CFR 503), which sets minimum standards that must be met before the biosolids can be land applied.
- 5. It is required that the beneficial use of the biosolids be an environmentally and economically sound process. The current solids handling treatment process produces approximately 40 wet tons of "Class B" biosolids per day. The digested sludge is dewatered in Andritz centrifuges to 20-30% solids.

1. Land Application of Biosolids

General Characteristics

The consistency is that of a paste with a moisture content that varies between 20 and 30% solids. Biosolids contain large amounts of organic matter to which are bound plant nutrients, such as nitrogen and phosphorous, as well as plant micronutrients, such as copper, selenium, and zinc. Biosolids, on an average dry basis, show a plant fertilizer value of 4.5 - 2.5 - 1 NPK.

The content of metals in biosolids is comparable or lower than other commonly used fertilizers. The 40 CFR Part 503 biosolids regulations defines the metal limits as "Ceiling Concentration" and "Exceptional Quality". Biosolids qualify for land application if at a minimum, they meet the ceiling concentration with the condition that the sites receiving can track, on an annual basis, the cumulative soil loading for all metals. The above-mentioned generators produce exceptional quality biosolids which exempts Shaen Magan and Betty Magan, dba Tule Ranch, dba Western Express Transporter's, Inc., a California corporation, dba Ag Tech LLC, an Arizona limited liability company ("Contractor") from tracking the cumulative metals soil loading. However, this tracking is still being done and reported.

Application Rates

Application rates are based on the nitrogen content in biosolids, expressed in milligrams of Nitrogen per kilogram, and the desired crop nitrogen needs. Nitrogen content in biosolids is determined from the average shown in the generator's reports provided monthly. Each crop has a specific nutrient requirement determined in the literature (e.g. Western Fertilizer Handbook). Biosolids is applied to a site in enough quantity in order to fulfill this need, also known as agronomic rate. Table 1 summarizes the plant nutrient requirement for the most common crops.

Сгор	Crop Yield (tons)	Biosolids Application Rate (lb./acre)		
		N	Р	K
Barley	2.5	200	60	160
Cotton	0.75	250	65	125
Silage Corn	12.0	250	60	150
Sorghum	3.5	225	60	165
Sudan	6	280	70	185
Wheat	3.0	250	70	200
Alfalfa	8.0	600	95	480

Crop Application Rate

The application rate for each particular site is first estimated from the site area, the crop to be planted, and the average nutrients in biosolids.

The results of the biosolids from different sources and a projection of the quantities of biosolids loads that are expected from each source are factored into the application rate

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calculation. This estimate produced by the site manager and provided to the field application foreman.

The primary factors used to calculate the application rate are the percent solids and nitrogen content of the biosolids, the nitrogen mineralization and volatilization rates, and the nitrogen needs for the crop to be planted (also known as plant available nitrogen or PAN). Application rates for crops subsequent to the first crop application may be reduced by the amount of nitrogen carryover when biosolids is applied to the same field in successive cropping seasons. If that is the case, a carryover of 10% is estimated for the PAN calculations. Subsequent applications have a 5%, 3%, and 3% carryover for the prior three years, respectively.

Contractor or its subcontractor integrates the process of determining target application rates and nutrient loading limits with the <u>computerized tracking system</u>. The site manager determines target application rates after consultation with the farm manager. The site manager determines the desired nitrogen and other nutrient levels utilizing soil and crop analyses, crop yield, and standard agronomic tables. He inputs this data into an electronic calculation table for a determination of the appropriate biosolids application rate required in order to reach the desired soil fertility levels. The system utilizes current biosolids analysis data to compute the target application rate needed to meet the fertility goals while maintaining a safe level of trace metals loading following an algorithm outlined below. The criteria for the critical parameter monitoring are included in the 40 CFR Part 503 Rule.

- **Step 1)** Determine the crop's nitrogen requirement (CNR) by the method described in the preceding paragraph.
- **Step 2)** Compute the pounds of available Nitrogen per ton of biosolids applied using the following embedded formula or nitrate testing of soil:

Pounds N/Ton Biosolids = $((\%NH4-Nj) \times \%Solids \times 500) + ((\%NO3-Nj) \times \%Solids \times 2000) + ((\%No) \times \%Solids \times 400)$

Where: Nj = inorganic nitrogen in biosolids No = organic nitrogen in biosolids

- **Step 3)** Compute residual nitrogen from previous land application as a measure of the percentage of original applied amount:
 - a) for current proposed crop = 20%
 - b) for second crop rotation = 10%
 - c) for third crop rotation = 5%
 - d) for fourth crop rotation = 3%
 - e) for fifth crop rotation = 3%

Residual Nitrogen (RN) = 3.a + 3.b + 3.c + 3.d + 3.e

or use c soil test data to determine PAN.

Step 4) Compute Target Application Rate (TAR):

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CNR - RN = TAR (pounds of N/acre)

TAR (pounds of N/acre) / Step 2 (lb. N/ ton biosolids) = TAR (tons biosolids/acre)

Step 5) Determine application limits based on annual whole sludge application rate (AWSAR)

Cumulative Pollutant Loading Rates, in Kg/ha, from Table 3, according to 40 CFR 503.13

A) Maximum Annual Pollutant Loading Rate, in Kg/ha, according to 40 CFR 503.13(b)(4):

Kg/ hectare	
Arsenic	2.0
Cadmium	1.9
Chromium	150.0
Copper	75.0
Lead	15.0
Mercury	0.85
Molybdenum	0.90
Nickel	21.0
Selenium	5.0
Zinc	140.0

B) Cumulative Pollutant Loading Rate, in Kg/ha, according to 40 CFR 503.13 (b)(2):

Kg/ hectare	
Arsenic	41
Cadmium	39
Chromium	3000
Copper	1500
Lead	
Mercury	17
Molybdenum	
Nickel	420
Selenium	100
Zinc	2800

Step 6) Determine the Target Application Rate (TAR)

The computer will default to the lowest sum in Steps 4 and 5 and this will be the TAR.

Step 7) Compute the remaining site life in years:

Determine the number of pounds of each metal that were added throughout the year utilizing the Annual Pollutant Loading Rates, Ceiling Concentration Limits (APLRC),

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prior application amounts, and Cumulative Pollutant Loading Rates, compute the remaining site life at current application rates:

 $AWSAR = APLRC \times 0.001$

The target application rate is monitored using the consolidated reporting forms and the computerized tracking system. The data is entered into the computer daily except weekends and holidays.

2. Management Plan

a. General Operating Constraints

Land application of biosolids is regulated at the federal level by the 40 CFR 503 Rule, which defines the minimum standards required for land application of biosolids (defining processing methods, which determine the vector attraction reduction and the pathogen level, as well as defining the concentration of metals, crops allowed, and site access restrictions). At the state level, the Arizona Department of Environmental Quality's 18 A.A.C. 9, Article 10 - Arizona Pollutant Discharge Elimination System Disposal, Use, and Transportation of Biosolids.

All land application sites have the applicable permits with the county or state agency that oversees this activity. The permits in Yuma County are issued by the Arizona Department of Environmental Quality (ADEQ).

The operation is finally governed by service level agreements signed between Contractor and its municipal customers. These contracts define the minimum requirements. Because Contractor services many municipal customers simultaneously, it will apply the contract conditions that are most stringent to its operation.

B. Management Practices

Land application follows harvest of any standing crop and the disking of the site to remove any furrows and incorporate remaining stubble. The project manager then flags any restricted areas by measuring the appropriate setback as defined in Arizona's Article 10 (whichever is applicable), or the local requirement, whichever is stricter.

The following management practices will be followed:

- Biosolids will not be applied at an application rate greater than the agronomic rate of the crop planned for the site
- Biosolids will not be applied to land that is flooded
- Biosolids will not be spread if the weather prohibits its incorporation
- Biosolids will be incorporated into the soil as soon as possible
- Every site will grow a viable crop prior to any additional biosolids application

C. Equipment Utilized

Contractor provides all the equipment used to transport and land apply biosolids. Biosolids are transported in belly dump, end dumps, or live-floor semi-trailers pulled by tandem-axle

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truck tractors. The net volume capacity of the trailers is between 40 and 54 cubic yards, which correspond to a net weight capacity of between 22 and 27 tons. The trailers are equipped with roll tarps that are secured by a number of ratchet tie-straps.

Biosolids are either unloaded to the receiving pit or at the designated land application site (Yuma County). Biosolids are then loaded into spreaders pulled by a standard agricultural tractor using a front-end loader or off loaded into a mixing pit in preparation for injection via tractor and chisel. A disk, also pulled by a standard agricultural tractor, incorporates the biosolids into the soil. Water trucks are used to supply the water for washing the biosolids residues off the trailers tires and to water the access roads to the fields to reduce dust. Water pumps are used to water the fields throughout the growing season. Sprinklers are also used in certain locations.

D. Transportation

a. Permits

Contractor and its sub-contract haulers are permitted as a motor vehicle contract carrier by the Interstate Commerce Commission and as a highway contract carrier by the California Public Utilities Commission.

b. Truck Routes

On a daily basis, the dispatcher, routes truck drivers to the assigned fields. The factors that influence routing selection include traffic (accidents, road construction), weather, location of residences, potential for dust, and school bus routes.

c. Delivery Windows

The general manager coordinates with the municipal customer's loading coordinator the best delivery window, which depends on the travel distance, traffic, route, and impact on the public.

d. Truck Maintenance, Appearance, and Recordkeeping

All trucks and trailers are properly maintained to provide the safe transport of biosolids and to prevent release of biosolids as per the <u>Biosolids Release Plan</u>. The mechanical maintenance schedule of truck tractors follows the manufacturer's recommendations, and the records are kept in the sub-contractor's office. The structural integrity of truck trailers are also tested by visual inspection and fixed accordingly to avoid accidents and biosolids releases. This includes the placing and maintenance of adequately working safety pins on trailer gates. All repairs are logged, and the records are kept in the sub-contractor's office. All truck maintenance records are made available to municipal customers upon request.

e. Driver Training

Contractor truck drivers receive training on an annual basis on the following:

- Loading and procedures at wastewater treatment plants
- Safety and biosolids
- Do's and don'ts of biosolids transportation
- Release prevention and release cleanup procedure
- Unloading and cleaning procedure
- Recordkeeping

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- Public relations
- PPE

The records of this training are kept in the sub-contractor's office and are made available to clients upon request.

E. Unloading and Washing

When a truck arrives at the designated field or at the processing site, the biosolids are unloaded onto the designated sites and the interior of the trailer thoroughly washed. Before leaving, the trailer is tarped and then trailer tires are washed clean of biosolids residues.

F. Storage

Material may be stored for a period of up to 2 years in Arizona. Contractor typically land applies and incorporates the biosolids immediately upon delivery to the site.

G. Spreading

Once the spreader is loaded with biosolids material and is at the designated site, it spreads the material uniformly on the land until the application rate for the planned crop is reached. A rough application rate can be calculated by dividing the capacity of the spreader by the area spread by the load (multiplying the distance traveled by the average broadcast distance). Depending on the soil conditions, the desired application rate can be done in two separate spreading events, as described below.

H. Incorporation

After spreading, the material is disked into the soil with a disk pulled by an agricultural tractor. For certain soil conditions, and to assure better blending and incorporation into the soil, the material can be spread in two complete cycles of spreading and incorporation. Prompt and adequate incorporation is done to avoid public nuisances, such as odors and flies.

I. Watering, Planting, and Cropping

Once a field has been adequately fertilized and amended with biosolids, it is ready for seed bed preparation, planting, cultivation, and irrigation. Once the crop growth cycle is complete, it is harvested and sold. Records of crop production are kept in Contractor's field office and are made available to its municipal customer upon request.

J. Soil types

Yuma County, Arizona

The sites permitted for biosolids land application contain Indio Silt Loam soils which are formed in mixed alluvium. The permeability is moderate with a potential rooting depth of 48 inches or more, high water capacity, and no surface runoff. This soil is used for irrigated alfalfa hay, small grains, cotton, sugar beets, grain sorghum, citrus fruit, vegetables, and Bermuda grass.

K. Staff Training

The training includes basic biosolids regulations on the federal, state, and local level as well as on the municipal customer's particular requirements. The training includes safety aspects related to biosolids handling, endangered species, public perception issues, and

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communication with the public. The training of staff is done on an annual basis and the records are kept in the Contractor's field office and are made available to clients upon request.

Contractor arranges the best available time for regular and subcontracted staff to be trained by the customers after previous notification.

3. Controls

A. Soil Testing

Soils from each field are analyzed prior to the initial biosolids application and subsequently after every 80 dry tons applied per acre application. A composite of soil from a depth ranging from 6-12 inches are sampled at 15 separate, randomly selected locations per field, and are analyzed by a certified laboratory.

B. Biosolids Quality

Biosolids received for land application must be endorsed by a Certificate of Biosolids Quality to ensure receiving at least Class B material. In the event, Sub-class B biosolids is received it will be redirected for land fill disposal, composting or "Further Treatment".

C. Odor Control

Odors at the site are not a major impact due to the remoteness of Contractor's site locations.

D. Noise Control

Truck and trailers are maintained in accordance with the Department of Transportation requirements for noise control.

E. Access Control

Fences along with postings and on duty personnel provide access control.

F. Stockpiling Issues

No stockpiling of Biosolids.

G. Site Restrictions

All field access points are posted with "No Trespassing" signs and ingress and egress are monitored by Company personnel.

H. Water Quality Controls

a. Surface Water

The setbacks from application sites to surface water courses, either dry or flowing, are 100 feet.

b. Groundwater

The setbacks to drinking water wells are 500 feet and to non-domestic wells are 100 feet.

I. Inspections

Verification of regulatory compliance is done by several different agencies. The Arizona Department of Environmental Quality, and the biosolids generators perform periodic

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inspections and report with verbal and written notifications and recommendations for improvement.

4. Emergency response

A. Weather

No application will be done when the precipitation is greater than 0.025 inches per hour or when the soil is saturated. When either of this occurs, the operation will be halted and, depending on the situation, may be moved to another more appropriate site. The project manager will inform the dispatcher and the customers of any change in schedules. The dispatcher, in turn, informs the drivers of any change in routes and delivery locations.

B. Biosolids Release Response

Please refer to Attachment A "Biosolids Response Plan" for a complete description.

C. Fire

Need for evacuation of fields or offices will be determined by field manager or dispatcher in event of threat of fire.

5. Monitoring

A. Soil Testing

Soils from each field are analyzed prior to the initial biosolids application. A composite of soil from ranging from 6-12 inches are sampled at 15 separate, randomly selected locations, and are analyzed on each permitted site. Soils are analyzed BC Labs or other certified laboratory for the following:

<u>Plant Macro Nutrients & others</u>: (analyzed prior to application)

- Total Kieidahl Nitrogen
- Phosphorous
- Ammonia Nitrogen
- Nitrate Nitrogen
- Phosphate
- Potassium
- · Cation Exchange Capacity
- Soil pH

<u>Trace Metals & others</u>: (analyzed when application has reached 40 dry tons of biosolids and every 40 dry ton thereafter)

- Arsenic
- Cadmium
- Copper
- Molybdenum
- Lead
- \Mercury
- Nickel

- Selenium
- Zinc
- PCBs
- Dioxins

Periodically, samples are tested for other parameters such as Boron, Total Petroleum Hydrocarbons, Toxic Organics indicators, Sodium Adsorption Ratio.

B. Recordkeeping

Contractor collects and maintains the following information indefinitely:

- The location, by quarter section, section, township, range and assessor's parcel number, of each site on which biosolids is applied, including a map, of scale 1:24,000 or larger, accurately showing the location.
- The number of hectares in each site on which biosolids is applied.
- The date biosolids was applied to each site.
- The cumulative amount of each pollutant, in mg/kg listed in Discharge Specification in the biosolids applied to each site.
- The amount of biosolids, in dry tons, applied to each site.
- The following certification statement:

"I certify, under penalty of law, that the requirements to obtain information in 40 CFR 503.12(e) (2) have been met for each site on which bulk sewage sludge is applied. This determination has been made under my direction and supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the requirements to obtain information have been met. I am aware that there are significant penalties for false certification including fine and imprisonment".

C. Reporting

Contractor, on a quarterly basis, reports to its municipal customers on a pre-selected number of activities that are deemed crucial for the sustainable management of biosolids.

Contractor annually submits to the Environmental Protection Agency, ADEQ and its municipal customers a tabulated summary of results of all biosolids and soil monitoring data and an evaluation of the data collected during the calendar year; the cumulative total loading of heavy metal for each site and a comparison to the allowable cumulative loading standards (including calculations); the results of soil pathogen monitoring; compliance with land use restrictions identified in Discharge Specification B.10; and documentation certifying that personnel working at the site adhered to the approved Guidelines for Endangered Species Protection required in Provision D. 7. The annual monitoring report is submitted for three years following the last biosolids application.

6. Community Relations and Communications Plan

A. Communication Options

Internal Communication

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Staff is to understand Contractor's Mission and how it associates with the policy of its customers. Training on this is done at least annually. Staff training on job operations, safety, releases and other emergency response is also done at least once annually. Records are maintained onsite including sign-in sheets and training agendas for each meeting.

External Communication

Management and staff can provide communication and outreach to interested parties. Communication can come through several different methods, such as:

- Direct contact with company via phone, e-mail, mail, etc.
- Presentations and outreach materials
- Tours of the facility and operation
- Classroom education
- Sponsoring of public events
- Correspondence with regulators, media, or associations
- Communication with Orange County Sanitation District and other generators

B. Community Inquiry Response Program

A Community Inquiry Response Form was created. This form is filled by staff receiving comments or complaints. Comments or complaints are logged in a binder called "Community Inquiry Response Forms", copies are then dispersed to all managers for review and response. Additionally, all generators are notified promptly by e-mail or phone for critical issues such as release, hazards or complaints, all other inquiries are forwarded with quarterly reports.

7. Contacts

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8. Closing Overview

At a very conservative nitrogen-based biosolids land application rate of 30 wet tons per acre, Contractor's 6,000 acres of permitted Arizona sites have the capacity to reuse 100%+ of the biosolids produced by The City of Escondido as well as Contractor's other municipal customers that beneficially use the Arizona land application sites.

In the event that The City of Escondido directs Contractor to landfill its biosolids, Contractor has entered into a biosolids landfilling agreement with the South Yuma County Landfill. The landfill will easily accommodate the daily production of Escondido's Biosolids. As a contingency option, the South Yuma County Landfill is also located adjacent to the City of Yuma, AZ, and benefits from being located in an area that takes into consideration the sensitivities of potentially impacted receptors. If necessary, Contractor also has access to additional landfill capacity at the Allied Waste Landfill located in Buckeye, AZ.

Contractor's current inventory of off-road equipment, tractors, trailers, and other equipment is sufficient to easily accommodate far more than the present daily volume of biosolids which we land apply each day.

As an existing biosolids management contractor, Contractor is also very familiar with the Biosolids Management System (BMS). Contractor will continue to conform to the BMS requirements for The City of Escondido's biosolids management needs in order to maintain and benefit from the high standards set by the National Biosolids Partnership. Contractor has adopted and implemented its own Biosolids Management Plan (BMP). The essence and benefits of the BMP is best captured by the "Company Policy" which states that "[Contractor] is committed to using best management practices and compliance with regulations while providing biosolids services to municipal wastewater treatment facilities." Contractor has adopted the procedures and guidelines found in both the California Water Environment Association (CWEA) Code of Good Practice and the National Biosolids Partnership (NBP) Code of Good Practice to continuously improve its biosolids management practices.

We continue to strive to avoid creating any nuisances, including dust, odors, vectors, and offensive visual impacts at all biosolids management sites in accordance with Biosolids Contractor Requirements.

Transportation

All transportation of the biosolids from each of the facilities will continue to be provided through subcontracts with Western Express and Western Express Transporter's, Inc. The City of Escondido's biosolids will continue to be transported in watertight end dump trailers as per preference, with retractable, intact tarp covers, all of which have already been inspected and approved for use.

On a daily basis, the trucking manager routes truck drivers to the scheduled site. The factors that influence routing include traffic (accidents, road construction), weather, location of residences, potential for dust, and school bus routes.

Regulatory Compliance

Contractor complies with all state or local policies and ordinances. Contractor has included in this proposal a complete description of all land application procedures for each of our facilities, which includes information for all back up facilities. Contractor has also included all operational permits for each of its primary reuse sites mentioned in this proposal.

Contractor is committed to conform to the NBP's Code of Good Practice. Contractor will continue to conform to other applicable good practices, Electronic procedures for tracking biosolids, reporting and record keeping, regulatory compliance, proactive maintenance, self-imposed requirements, public outreach and documentation, participation in audits and any required corrective actions, corrective and preventive actions for all inspection findings, training and emergency preparedness plans, and other elements that may have procedural and cost implications for Contractor. Contractor will conform and comply with any and all periodic inspections and audits by The City of Escondido or its appointed auditors and understands that inspection findings require written root cause and corrective actions within 10 business days.