

Proposal for
Biosolids Beneficial Use Services
RFP 54B-2021

to the

CITY OF BELLINGHAM



Submitted on
December 16, 2021



DECEMBER 13, 2021

City of Bellingham
Purchasing Office
2221 Pacific Street
Bellingham, WA 98229

**Re: Biosolids Beneficial Use Services Request for Proposal
RFP #54B-2021
Addendum No. 1, November 16, 2021**

Dear Ladies and Gentlemen:

Synagro West, LLC (Synagro), North America's preeminent provider of biosolids management services, is pleased to submit this response to the above referenced Request for Proposal (RFP) for the City of Bellingham ("City" or "Bellingham"). We recognize that this RFP seeks to engage a service provider which can offer prospective outlets or opportunities for use of the dewatered cake that the City will produce once its TPAD system is online in 2026. In that context, this is considered "Phase 1" of the process, insofar as the actual need to manage TPAD solids is some years away.

Synagro's experience and expertise in developing such options for the management of exceptional quality biosolids is unrivalled. Across North America the company owns and/or operates more than 20 facilities producing biosolids-derived products such as compost, fertilizer pellets, and manufactured soils. In 2020, we marketed and distributed over 500,000 tons of such products.

We currently manage about 29,000 wet tons per year of TPAD cake through our contract with the City of St. Petersburg, Florida. The bulk of this material goes to direct land application. Additionally, in Maryland we utilize DC Water's Bloom® product (dewatered cake produced through thermal hydrolysis and anaerobic digestion) in the production of soils. Also in Maryland, Synagro operates its Watershed Resources Center which accepts biosolids from various generators, processes them to produce an exceptional quality product, then blends that

product with various other materials to produce soil amendments, topsoil products, and liming agents.

In our enclosed proposal, we outline our approach to this Phase 1 work, provide additional information on our experience and expertise, and finally provide our cost proposal to undertake the work.

Synagro's primary contacts for this project are:

Ms. Ericka Day, Area Sales Manager
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Lacey, WA, 98503
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eday@synagro.com

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Rancho Cordova, CA 95670
phone: 650-862-5982
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The enclosed response is submitted in response to the above-referenced Request for Proposal. Through submission of this proposal, we agree to all of the terms and conditions of the Request for Proposal.

We have carefully read and examined the Request for Proposal and have conducted such other investigations as were prudent and reasonable in preparing the proposal. We agree to be bound by statements and representations made in this proposal and to any agreement resulting from the proposal.

Please feel free to reach out to Ericka Day with any questions or comments you may have about our proposal. We look forward to discussing our project approach with you in the near future.

Sincerely,



Emil Kneis
Sales Support Manager

EK:kw





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I. Project Approach and Understanding

UNDERSTANDING THE CITY'S NEED

Having developed and then committed capital to construct numerous projects designed to produce an exceptional quality biosolids-derived product, Synagro is uniquely aware of the overarching need to early identify prospective outlets for those products. No utility director wants to go back to their board and explain why they invested millions of dollars in a system only to discover after the fact that there is no market for the product that system produces.

Moreover, the City is prudent in its desire to establish multiple outlets for the TPAD product; this approach should enable the City to mitigate any market impacts due to seasonality, operational issues, or other fluctuations in the marketplace. We understand Bellingham's reluctance to include direct land application in the suite of potential outlets for the product but encourage you to re-consider that as we have found that direct land application can provide a reliable, large volume outlet for such "new" products being introduced in the market while local markets are developed. In any case, even if other local outlets which can beneficially utilize all the City's product are developed, direct land application can serve as a back-up outlet in case conditions limit access to those local markets.

Synagro is an operations company and, as such, can bring a perspective to this project that an engineering consultant likely would not possess. For instance, we:

- can consider the nuances associated with daily transportation of products – where is it going to go, when is the best time for it to be transported, and how can we avoid impacting sensitive receptors along the route;
- deploy our understanding of composting to recognize if an existing site has the capacity and equipment to accept additional input or if an expansion is warranted, or, if for a new site, are there sources of bulking agent within a reasonable transportation distance such that the costs of processing are not encumbered by having excessive costs for this material;
- rely on our experiences with producing manufactured soils and soil amendments to assist potential partners in developing the best recipes for blends that both meet the market requirements for the end product while providing a practical outlet for the TPAD cake; and
- utilize our expertise in working with growers and farmers to develop land application outlets that can serve as interim and/or back beneficial use options for Bellingham.

While fulsome development of some of these aspects of the market cannot be accomplished until Bellingham is producing the TPAD cake (so that characteristics can be well-defined and approvals from the Department of Ecology obtained), Synagro will utilize our in-house understanding of TPAD cake characteristics to begin discussions with prospective outlets as we gauge their interest in utilizing the City's product.



PROJECT APPROACH

Synagro’s in-State Area Sales Manager, Ms. Ericka Day will lead the company’s efforts and will be the primary contact for the City on this project. Ms. Day will work with local resources and our regional partners (e.g., Tribeca Transportation, LLC.) who possess knowledge of the recycling business environment in Whatcom County and the surrounding region. Our approach will comprise a several-step assessment of the opportunities for beneficial use of the TPAD cake once it is produced. As a first step, we will create a database of various prospective outlets for the product within a reasonable transportation distance of the Post Point WWTP; this list may include existing composting facilities, soil manufacturing companies, and other opportunity sites (e.g., on-farm digesters, land application sites, etc.). In addition to location of the facility and type of outlet, the database will include, where available, site owner’s name and contact information, information on any local or State of Washington issued permits, and such other information as can be easily developed through public sources. We anticipate that compilation of these data and information will require approximately three months from notice to proceed. We will also contact the Department of Ecology to understand their perspective on distribution and marketing of exceptional quality biosolids.

Upon completion of the database, we will meet with the City’s team to discuss our findings and determine if any of the listed outlets are not acceptable to the City for any reason. Upon completion of this exercise, our second step will be the field evaluation of the remaining facilities (depending on the final population of prospective outlets, we may evaluate a percentage of or all of those). Our field evaluation will include a determination of the proximity of any neighborhoods and/or sensitive receptors (e.g., schools, churches, etc.) that potentially could be impacted by truck traffic and/or odor issued that might be assigned to the inclusion of biosolids in an existing process. We will also gauge the size and relative development of the processing site to gain an understanding of whether the facility can accommodate additional truck traffic and/or capacity to accept, process, and inventory the additional amount of product to be produced. The outcome of the field evaluation will be a winnowing of the database to the facilities that we believe can support the incorporation of Bellingham’s TPAD product into their operations. The field evaluation will likely require another three months. As with step one, we will present our findings to the City and modify the database with the City’s inputs.

The third step in our work will be meeting with the owners/operators of several of the facilities we believe may be viable outlets. These meetings will be used to gage the interest those folks have in incorporating TPAD product into their processes and, where an interest exists, any projections of the steps that would be required to begin acceptance of the material. These steps might include, but not necessarily be limited to permit modifications, need to purchase different/additional equipment, requirement for physical expansion of a facility. This third step is expected to take at least 4-5 months as appointments will have to be set, meetings held, and any follow-up information assessed. A final report on the outcome of these visits will be presented to the City.

Concurrently with all of this work, Synagro will be scouting for potential sites where we can develop our own facility to manage the City’s TPAD cake. Should we be successful in finding and initiating development of such a site, we will advise the City.

A general timeline, as described above, is depicted in the table below.





Table 1 - Anticipated Project Timeline

| Activity | Expected Duration | Estimated Month of Completion |
|---------------------------------------|-------------------|-------------------------------|
| Notice to Proceed | 1 day | March 2022 |
| Step 1: Database Development | 3 months | June 2022 |
| Presentation of Results | 1 day | June 2022 |
| Step 2: Field Evaluation | 3 months | September 2022 |
| Presentation of Results | 1 day | September 2022 |
| Step 3: Site Meetings | 5 months | February 2023 |
| Final Presentation of Findings | 1 day | February 2023 |

2. Experience and Expertise

SYNAGRO'S QUALIFICATIONS, EXPERIENCE, AND SPECIAL EXPERTISE

Founded in 1986, Synagro's core business is the environmentally sound and economically viable management of biosolids and other organic by-products/wastes. Synagro's business model includes including project development, facility operations and final product distribution. Through this focus, Synagro has grown to be North America's leading provider of high-quality, cost-effective biosolids management and beneficial use solutions. We continually meet the biosolids management needs of over 650 generators across 34 states.



Synagro annually manages more than 14 million tons of biosolids; of that, nearly 2 million tons is managed through processed that produce an exceptional quality biosolids product (e.g., compost, heat-dried pellets, etc.). Synagro employs a team of 750+ professional engineers, soil scientists, agronomists, construction managers, financial managers, and the largest, most diverse operational staff in the industry. Our team is dedicated to working with our clients to find the right solution to their biosolids and allied residuals management challenges. Synagro, and its subsidiaries, are at the forefront of the environmental movement to safely process and market organic residual materials for beneficial uses.

Our broad suite of biosolids management services includes owning and/or operating and maintaining the complete range of organics processing options listed below:

- Composting
- Heat-drying and pelletization
- Digestion
- Permanent dewatering (installation and operation)
- Incineration
- Mobile/temporary dewatering
- Land application and reclamation
- Lagoon and digester cleaning
- Alkaline stabilization
- Transportation (truck and rail)



Each year, we manage nearly 500,000 tons of exceptional quality biosolids and products derived from those materials. These products include composts, topsoil, soil amendments/liming agents, fertilizers, and alternative fuel products.

Specifically germane to the City's project, Synagro manages exceptional quality biosolids dewatered cake produced through advanced anaerobic digestion processes. For the City of St. Petersburg, Florida, we transport and distribute, primarily through land application, about 29,000 tons of TPAD dewatered cake. Through this work we bring to Bellingham's project an understanding of the general characteristics of this product and can, in this context, offer our insights and experiences in handling this material to prospective outlets in and around Whatcom County.

We also manage a portion of the daily production of (Washington) DC Water's Bloom® product which is dewatered cake produced through thermal hydrolysis, anaerobic digestion, and dewatering. This exceptional quality product is transported to a nearby sand and gravel mining operation where the biosolids are mixed with other soil materials to produce a manufactured topsoil. This topsoil product can be used in roadway work, in support of development projects, and in restoration of a vegetative cover on sites disturbed by mining or similar activities.

At our Watershed Resources Center (WRC) in Maryland, we receive dewatered biosolids from several regional generators -- these solids may or may not meet Class B pathogen reduction -- and process those materials through a combination of lime-stabilization and heat drying. The resultant exceptional quality product can be distributed directly but is also blended with any of several other by-products (e.g., sawdust, sand, gypsum) to develop specific additional products (see: [Growers - Synagro](#) for a listing and description of those products).

RESUMES AND ROLES/RESPONSIBILITIES

The following Synagro team members will or may have roles in the City's project:

Ericka Day – As Synagro's Area Sales Manager, officed in the State of Washington, Ericka will be the "lead investigator" on the City's project and be Bellingham's primary contact for the work. Ericka has been a Synagro employee since 2015 and recently moved to Washington to lead the company's sales and development efforts in the Pacific Northwest. Among her notable experiences and one germane to the City's project, Ericka developed and then supported servicing of Synagro's contract to manage lime potable water plant residuals for the City of Des Moines, Iowa. Ericka conducted market outreach and established relationships with the regional agricultural community to which the product (branded by Synagro as MicroLime®) is distributed.

Ericka is expected to allocate 15% of her time to the Bellingham project.

Robert Pepperman – a senior member of Synagro's Development team, Bob brings over 38 years of experience in the biosolids management industry to this project. An agronomist, Bob has worked with



regulatory agencies across the country, including the Washington Department of Ecology. Most recently, he has been a lead member of an ad hoc committee working with the South Carolina Department of Health and Environmental Control (DHEC) to revise DHEC's regulations related to distribution and marketing of exceptional quality biosolids. Additionally, Bob was the successful developer of a regional biosolids composting facility owned and operated by Synagro through a public-private partnership with Charlotte County, Florida. He has also been intimately involved in Synagro's programs to market and distribute the company's exceptional quality products.

Bob is expected to provide in-person and/or remote guidance and support on the project on an as needed basis.

Mike Hodge – Mike recently joined Synagro as the company's Vice President Organics & Product Marketing. In this role, Mike has oversight of Synagro's product marketing activities across the company's operating footprint. From Synagro's 20+ facilities producing exceptional quality biosolids and biosolids-derived products, his team distributes fertilizer and soil amendment products to agricultural, landscape and turf, and land reclamation markets. Prior to joining Synagro, Mike held a similar position with New England's largest recycler of organics and allied materials. There he developed sales funnels, closed sales and managed the successful distribution of landscape products from six manufacturing facilities throughout the Northeast.

Mike is expected to provide remote guidance and support on the project on an as needed basis; he may also participate in-person as needed.

John Uzupis – John is Synagro's Mid-Atlantic Technical Services Director. John contributes value to the Bellingham project through his long tenure in the biosolids management industry, including developing and initiating commercialization of soil blending operations incorporating exceptional quality biosolids cake (DC Water's Bloom® product). John is a Certified Nutrient Management Specialist and because of his deep subject matter expertise and recognized industry leadership, he was chosen as a member of the Maryland Department of Agriculture's Phosphorus Management Tool Transition Advisory Committee which makes recommendations aimed at more effectively implementing the procedure that uses characteristics of soils landforms and management practices to identify the potential risk of phosphorus losses from all sources to land to water. Prior to joining Synagro, John worked for a decade with the Pennsylvania Department of Environmental Resources in permitting and enforcement. During his tenure there, he was noted for streamlining the bond release process and permitting the first biosolids reclamation project in the region.

John is expected to provide remote guidance and support on the project on an as needed basis.

Lisa Williams – An agronomist who first joined Synagro in 1992, Lisa Williams is a recognized expert in the field; her expertise has led to her appointment to regional task forces and committees developed to assess how sound biosolids management regulations play a role in nutrient management planning aimed at protecting the Chesapeake Bay. Lisa was also a founder and co-developer of the processes deployed at Synagro's Watershed Resources Center (WRC). The WRC accepts regionally produced biosolids, processes them to meet exceptional quality standards, and then blends that material with other by-products to produce fertilizers, soil amendments and liming agents. She is a co-holder of patents on several of these processes. As



part of her current responsibilities, Lisa oversees the distribution and marketing of several products the WRC produces.

Lisa is expected to provide remote guidance and support on the project on an as needed basis.

Michael Kotelec – Mike is Synagro’s Regional Vice President for the West Region and, in this position, will serve the role of “principal in charge.” Mike currently has management responsibility for all Synagro’s projects in northern California, Oregon, Washington, and British Columbia. Included in Mike’s territory is one composting facility (Central Valley Composting) and three facilities operating dewatering and drying systems (Sacramento, California; Honolulu, Hawaii, and Victoria, British Columbia; the latter two also include operations of anaerobic digestion).

Mike is anticipated to provide in-person and/or remote guidance and support on the project on an as needed basis. He will also serve as a contact for the City should Ericka Day be unavailable for any reason.

EXPERIENCE WITH GOVERNMENTAL AGENCIES

A core of Synagro’s business offerings is the transportation and land application of Class B biosolids and other residuals on site permitted for such treatment. As such, the company has a broad and varied level of experience in dealing with governmental agencies across North America.

Our team includes staff who focus on new and developing regulations and legislation, this team monitors current issues within the biosolids industry, ranging from those related to public acceptance and community outreach to evaluations of emerging contaminants. This group is obviously currently focused on the various regulatory issues related to PFAS and similar chemical compounds. Additionally, members of this team and others are working with agencies (and universities and associations) on understanding and promoting the benefits of biosolids and biosolids-derived products as they relate to soil health, carbon sequestration, and climate change.

Synagro prides itself on its fully staffed Compliance group which provides oversight of the regulatory aspects of our work, including but not limited to, monitoring of analytical data used to assure suitability of the materials for use and compliance with regulatory requirements, tracking of the mass of biosolids delivered to any permitted site such that approved rates of application are not exceeded, and compilation of data and information and preparation of required periodic reports to regulatory agencies; for some of our municipal partners, our Compliance team will prepare the full annual report as required under 40 CFR 503.

The Synagro team also includes numerous individuals who are agronomists, soil scientists, agricultural specialists, and nutrient management planners who serve on our Technical Services teams nationwide. These folks are those who reach out to growers who might be interested in using biosolids to support their farming operations. The Technical Services team explains the benefits and the controls on biosolids application and, once an end-user agrees to utilize the material, these team members will develop the data and information necessary to obtain a permit or approval for biosolids application to that site. The Technical Services team will follow the regulatory process, appearing at public meetings or hearings in support of the application,



addressing questions or comments from both the agency(ies) and the public during permit application review and, once a permit is issued, work with both the grower and our Operations team to stake out the approved application area, including designating required setbacks and buffers, and provide oversight on the appropriate rate of application for the crop to be grown.

ABILITY TO MEET SCHEDULE AND BUDGET

As the developer of numerous capital projects and a for-profit enterprise, Synagro management and staff focus on delivering projects on time and under budget. From our \$70 million capital project to dewater and dry the 60,000 dry tons of biosolids annually generated by the City of Philadelphia, Pennsylvania to the smallest services contract, the Synagro team is keenly aware of how slippage in schedule can adversely impact budgets.

We manage our business by regions and thus each region establishes its own budget and performance metrics on a project-by-project basis; some of those are established as an integral portion of the bidding/proposal process for new work. Once those budgets are established, area managers and facility operators are reviewed based on their performance relative to those budgets (among other items). Periodic calls to assess issues and budgetary impacts are held and, quarterly, a review of schedule and budgetary performance is conducted. This latter activity informs senior management of the status of our overall budget and is used to derive performance bonuses to the operations team.

This routine attention to detail should provide Bellingham with a high degree of comfort that Synagro will meet the schedule for performing the proposed scope of work and do so in accordance with the pricing for the work offered below.

3. Proposed Fees/Costs

As mentioned above, Synagro is an operations company; we are not consultants and thus do not provide schedules proposing billable hours, hourly rates, or detailed breakdown of expenses. Rather we are proposing to perform the work outlined above for \$150,000 to be bill as follows:

- 12 monthly payments: \$12,500 per month

This sum will provide for the required expenditure of effort necessary to develop an understanding of the market opportunities for the City's TPAD product, preliminarily establish outlets for the product, and enable Synagro to be prepared to offer biosolids management services to Bellingham at the earliest possible date and in support of the TPAD commissioning, and under Phase 2 of this project.