

4951 Dakota Lane Project Narrative

This specific use permit ("SUP") request is to allow for a High-Impact Manufacturing uses at 4951 Dakota Lane Denton, Texas 76207 (the "Property"). According to a letter from the City of Denton dated June 27, 2012, the Property's address was changed from 5011 Dakota Lane to 4951 Dakota Lane. A copy of this letter has been provided to avoid any confusion regarding the address of the Property. The Property is located within the city limits and is approximately 3.19 acres. The Property is currently developed as warehouse/office uses as indicated by the current Certificate of Occupancy. The Current plat was filed with Denton County on May 28, 2008 and will not be replatted.

The SUP is required to bring the Property into compliance with the Denton Development Code for the production of an agricultural fertilizer, specifically, a proprietary and patent-pending Nitrogen use efficiency product ("NTS") which is a nonhazardous and sustainable biostimulant product used as a soil amendment to assist with Nitrogen use efficiency in row crops.¹ Additionally, a conceptual layout of the tank and system locations on the Property is provided separately for clarity.

According to the City of Denton Zoning Map, the Property is currently zoned heavy industrial; land to the north, east, and west is also zoned as heavy industrial; and land to the south is in the City of Denton ETJ. Surrounding land is either undeveloped or developed with industrial uses compatible with the proposed high-impact manufacturing use.

The Property is generally level with little to no grade change. The Property is located north east of Hickory Creek and no operation or storage of materials will occur within any floodplain. The Property will maintain the existing adequate parking and space for vehicle maneuvering throughout the site. Because the site and its surroundings are used for industrial manufacturing, no open space, recreation, or preservation areas exist on site. Existing utilities on the Property are present to accommodate industrial manufacturing uses and will be maintained for efficient operation of the proposed use. Proper water, wastewater, storm water, solid waste, and electrical standards will be maintained on the Property for the proposed use.

We are committed to adhering to all local, state, and federal laws and requirements associated with the proposed high-impact manufacturing use. The applicant has received the current No Exposure Certification for the Property effective April 4, 2024 and will apply for and maintain all necessary permits associated with the proposed use including, but not limited, to the hazardous materials permit. Agricen will ensure that all necessary infrastructure required to maintain safe and effective operation of the Property and the proposed high-impact manufacturing use will be provided and consistently maintained, in accordance with any and all requirements of the City of Denton and the Denton Development Code.

As mentioned briefly above, the proposed use for the Property is consistent with the surrounding industrial uses. The Property is compatible with the Denton 2040 Comprehensive Plan

¹ See detailed background on the manufacturing process, attached herein as Exhibit A.

which designates the Property as Industrial Commerce defined as locations "where the predominant uses include both light and heavy industrial uses, such as moderate to heavy manufacturing, assembly, fabrication, and wholesaling." The specific use proposed has little to no impact on the future development of the area primarily because it is consistent with the existing and surrounding uses and does not prohibit or hinder further development of any surrounding sites. We will ensure that the proposed high-impact manufacturing use and associated Property will meet and continue to meet all standards of the Denton Development Code and all other applicable codes of the City of Denton.

The proposed use will not materially alter the existing access, traffic, emergency services, utilities, parking, refuse areas, noise, glare, and/or odor currently provided or emitted from the Property and its existing use. Should any alterations occur, we are committed to remedying any impacts. As shown in the provided materials with our SUP application, Agricen is committed to maintaining the highest standard of safety throughout its facilities and the surrounding area. Agricen is majority owned by Loveland Products, Inc., the proprietary products arm of the largest North American agricultural retailer, Nutrien Ag Solutions. As such, it follows Nutrien's broad and rigorous safety standards. Provided in the revised resubmittal are samples of that broad safety program. Additionally, temporary flexible hoses are used to periodically transfer material between 4951 Dakota Lane and 5001 Dakota Lane. Traffic control equipment will be utilized to prevent vehicles from entering the area of use to avoid damaging the hose and to prevent material spills. Through the implemented safety measures, any potential adverse impacts to the health, safety, and welfare of the employees, inhabitants of the area, and the City of Denton as a whole have been mitigated and/or eliminated.

Exhibit A

Background / Manufacturing Process for Agricen Products Produced at 4951 N Dakota Lane

Description of the Product: Agricen manufactures its proprietary and patented soil amendment technology (which is referred to in this document as “Nutrient Release Technology” or “NRT”) in the building located at 4951 Dakota Lane. This non-hazardous biostimulant product is produced via a fermentation process to achieve a final product with a volume that is greater than 99% water with a less than 1% microbial consortium that includes numerous proprietary microbes. These beneficial microbes have been proven to assist with growth promotion in plants, and growers widely use this sustainable technology in row crops for its ability to release nutrients and improve plant growth.

Overview of the Manufacturing Process:

Agricen operates two NRT systems at 4951 Dakota Lane. One system has a working volume of approximately 230,000 gallons and a retention time of approximately 16 days and the second system has a working volume of approximately 80,000 gallons and a retention time of 8 days, with each system’s volume almost entirely water. The NRT production process involves a closed fermentation system consisting of a plug-flow bioreactor system whereby a feedstock of organic material and yeast is injected into a flow through system that utilizes water as the continuous hydraulic input.

The inputs are as follows:

1. Water (CAS No. 7732-18-5)
2. Organic Material (CAS No. Not Applicable)
3. Yeast (CAS No. 68876-77-7)

Feeding rates are controlled for complete decomposition of the feedstock materials, allowing for the typical anaerobic decomposition processes of acidogenesis, acetogenesis, and methanogenesis to occur. The fermentation process completely digests and eliminates all traces of manure and yeast in the original feedstock, leaving behind only bacterial cells and their by-products in a water-based medium.

The system output goes through a reverse osmosis (RO) filtration step to remove water and provide a more concentrated final product. The clean water (permeate) exiting the filtration system is recycled to front of the system, reducing reliance on city water for the process input. The retention in the filtration process is the concentrated final product - a clear golden liquid consisting of the beneficial *Bacillus* species and bacterial by-products from the fermentation system. The end product undergoes a 2-hour heating step at 65°C to pasteurize the product. As an added precaution, every product batch is sampled and sent to an independent food quality laboratory to test for human pathogens. The product is regulated as a soil amendment (rather than a fertilizer) because it has no nutrient content. It consists solely of water and the microbial consortium and has a pH range of 7.5 to 8.5.

Agricen primarily sells the final product from the NRT system as a standalone product, but also produces some blends at 4951 Dakota Lane. Agricen stores Urea Ammonium Nitrate (UAN) for some of those blends, and could store up to 5,000 gallons in a bulk tank. Agricen stores UnFoamer, a silicone-based surfactant that helps defoam products or blends that might foam when agitated, and typically stores approximately 100 gallons of UnFoamer. Agricen also stores Proxel GXL for possible use as a preservative in some blends, and typically stores approximately 400 gallons of Proxel GXL.

Agricen utilizes two different mixtures to clean and maintain its RO system: RoClean L403 and RoClean P111. Agricen typically stores approximately 25 gallons of RoClean L403 and 50 gallons of RoClean P111.

5001 Dakota Lane Project Narrative

This specific use permit ("SUP") request is to allow for a High-Impact Manufacturing uses at 5001 Dakota Lane Denton, Texas 76207 (the "Property"). The Property is located within the city limits and is approximately 3.03 acres. The Property is currently developed as warehouse/office uses as indicated by the current Certificate of Occupancy. The current plat was filed with Denton County on May 28, 2008 and the Property will not be replatted.

The SUP is required to bring the Property into compliance with the Denton Development Code for the production of an agricultural fertilizer, specifically, a proprietary and patent-pending Nitrogen use efficiency product ("NTS") which is a nonhazardous and sustainable biostimulant product used as a soil amendment to assist with Nitrogen use efficiency in row crops.¹ Additionally, a conceptual layout of the tank and system locations on the Property is provided separately for clarity.

According to the City of Denton Zoning Map, the Property is currently zoned heavy industrial; land to the north, south, east, and west is also zoned as heavy industrial. Surrounding land is either undeveloped or developed with industrial uses compatible with the proposed high-impact manufacturing use.

The Property is generally level with little to no grade change. The Property is located northeast of Hickory Creek but not within a floodplain. The Property will maintain the existing adequate parking and space for vehicle maneuvering throughout the site. Because the site and its surroundings are used for industrial manufacturing, no open space, recreation, or preservation areas exist on site. Existing utilities on the Property are present to accommodate industrial manufacturing uses and will be maintained for efficient operation of the proposed use. Proper water, wastewater, storm water, solid waste, and electrical standards will be maintained on the Property for the proposed use.

We are committed to adhering to all local, state, and federal laws and requirements associated with the proposed high-impact manufacturing use. The applicant has received the current No Exposure Certification for the Property effective April 4, 2024 and will apply for and maintain all necessary permits associated with the proposed use including, but not limited, to the hazardous materials permit. Agricen will ensure that all necessary infrastructure required to maintain safe and effective operation of the Property and the proposed high-impact manufacturing use will be provided and consistently maintained, in accordance with any and all requirements of the City of Denton and the Denton Development Code.

As mentioned briefly above, the proposed use for the Property is consistent with the surrounding industrial uses. The Property is compatible with the Denton 2040 Comprehensive Plan which designates the Property as Industrial Commerce defined as locations "where the predominant uses include both light and heavy industrial uses, such as moderate to heavy manufacturing, assembly, fabrication, and wholesaling." The specific use proposed has little to no impact on the future development of the area primarily because it is consistent with the existing

¹ See detailed background on the manufacturing process, attached herein as Exhibit A.

and surrounding uses and does not prohibit or hinder further development of any surrounding sites. We will ensure that the proposed high-impact manufacturing use and associated Property will meet and continue to meet all standards of the Denton Development Code and all other applicable codes of the City of Denton.

The proposed use will not materially alter the existing access, traffic, emergency services, utilities, parking, refuse areas, noise, glare, and/or odor currently provided or emitted from the Property and its existing use. Should any alterations occur, we are committed to remedying any impacts. As shown in the provided materials with our SUP application, Agricen is committed to maintaining the highest standard of safety throughout its facilities and the surrounding area. Agricen is majority owned by Loveland Products, Inc., the proprietary products arm of the largest North American agricultural retailer, Nutrien Ag Solutions. As such, it follows Nutrien's broad and rigorous safety standards. Provided in the revised resubmittal are samples of that broad safety program. Additionally, temporary flexible hoses are used to periodically transfer material between 4951 Dakota Lane and 5001 Dakota Lane. Traffic control equipment will be utilized to prevent vehicles from entering the area of use to avoid damaging the hose and to prevent material spills. Through the implemented safety measures, any potential adverse impacts to the health, safety, and welfare of the employees, inhabitants of the area, and the City of Denton as a whole have been mitigated and/or eliminated.

Exhibit A

Background / Manufacturing Process for Agricen Products Produced at 5001 N Dakota Lane

Overview: Agricen produces three of its key commercial biostimulant technologies in the building at 5001 N Dakota Lane: its Carbon Based Technology (or “CBT”) its Marine Based Technology (or “MBT”), and its Phosphorus-Solubilizing Technology (or “PST”). It is also producing test product from its soon-to-be commercialized Nitrogen Trifecta System (or “NTS”).

Carbon-Based Technology / CBT

Description of the CBT Product: Utilizing a proprietary and patent-pending production process, Agricen produces a non-hazardous biostimulant product that is a 100% extract of Leonardite (i.e., a low-grade coal). This product has been proven to assist with plant growth promotion, stress tolerance in plants, and root development.

Overview of the CBT Manufacturing Process:

Agricen operates two CBT systems at 5001 N Dakota Lane, each with a working volume of approximately 16,000 gallons and a retention time of approximately 10 days. The CBT system utilizes Leonardite as a feedstock material fed in a continuous medium of water. The feedstock is pretreated with a low concentration .25 MM of Potassium Hydroxide (KOH) to enhance microbial accessibility for extraction. Agricen typically stores approximately 2,500 lbs of KOH flake to support its CBT system. The pretreated Leonardite is pumped through a series of aerobic bioreactors to extract the finished product. The system receives yeast to serve as a microbial food source to activate native microbial communities accompanying the Leonardite. Rock phosphate is also fed as a nutrient source to support microbial growth.

The inputs are as follows:

1. Water (CAS No. 7732-18-5)
2. Leonardite (CAS No. 129521-66-0)
3. Potassium Hydroxide (CAS No. 1310-58-3)
4. Rock Phosphate (CAS No. 1306-05-4)
5. Yeast (CAS No. 68876-77-7)

The CBT process utilizes a closed multistage bioreactor system connected in a series to achieve the desired enriched microbial communities from the Leonardite while also releasing organic acids from Leonardite. The final product is a homogeneous dark liquid solution. The product is considered a soil amendment rather than a fertilizer because it has no nutrient content. It consists solely of the Leonardite extract and has a pH range of 8.0 to 9.0.

Marine Based Technology / MBT

Description of the MBT Product: Utilizing a proprietary process consisting of patent-pending elements and trade secrets, Agricen produces a non-hazardous biostimulant product that is a 100% extract of seaweed. This extract has been proven to assist with stress tolerance in plants, so growers can use the technology in row crops for its ability to mitigate stresses like drought and heat, and it also can act as a safener for seeds from fertilizer salt burns.

Overview of the MBT Manufacturing Process:

Agricen operates two MBT systems, each with a working volume of approximately 13,000 gallons and a retention time of approximately 10.5 days. The approach employs a continuous closed fermentation system comprised of a series of plug-flow, packed bed reactors. The MBT system utilizes two feedstock materials – powdered kelp meal (*Ascophyllum nodosum*) and chitin – added to water to seed a working solution. Agricen can also substitute *Ascophyllum nodosum* for a different kelp meal for purposes of product differentiation.

The inputs are as follows:

1. Water (CAS No. 7732-18-5)
2. *Ascophyllum nodosum* (CAS No. Not Applicable)
3. Chitin (CAS No. 1398-61-4)
4. Yeast (CAS No. 68876-77-7)

The feedstocks are hydrolyzed and fed yeast to activate and enrich the indigenous microbiology. The mixture is subsequently processed through the fermentation reactors at a fixed working capacity and an optimized hydraulic retention time. Phased conversion of the organic inputs occurs by the activity of the native organisms. The system output goes through a reverse osmosis (RO) filtration step to remove water and provide a more concentrated final product. The clean water exiting the filtration system is recycled to front of the system, reducing reliance on city water for the process input. The retention in the filtration process is the concentrated final product - a clear, amber-colored liquid kelp meal extract. The product is regulated as microbe food rather than a fertilizer because it has no nutrient content. It consists solely of seaweed extract and has a pH range of 7.0 to 8.0.

Phosphorus Solubilizing Technology / PST

Description of the PST Product: Utilizing a proprietary process consisting of patent-pending elements and trade secrets, Agricen produces a non-hazardous biostimulant product via a fermentation process to achieve a final product with a volume that is greater than 99% water with a less than 1% microbial consortium that includes proprietary microbes. These microorganisms have been proven to assist in phosphate solubilization and growers use the technology in row crops for making bound phosphorus in soil more available for plant to uptake.

Overview of the PST Manufacturing Process:

The PST system has a working volume of approximately 60,000 gallons and a retention time of approximately 18 days. The PST system utilizes rock phosphate as feedstock material, fed in a continuous medium of water through a series of aerobic bioreactors. Additionally, the system receives yeast and an organic material slurry to serve as a microbial food source to active native communities accompanying the rock phosphate for fermentation. The process uses a plug-flow aerated system to achieve desired enriched communities from the microbial community native to the rock phosphate that aid in the degradation of rock phosphate. The system output goes through a reverse osmosis (RO) filtration step to remove water and provide a more concentrated final product. The clean water exiting the filtration system is recycled to front of the system, reducing reliance on city water for the process input. The retention in the filtration process is the concentrated final product, PST - a light-yellow liquid.

The inputs are as follows:

1. Water (CAS No. 7732-18-5)
2. Rock Phosphate (CAS No. 1306-05-4)
3. Organic Material (CAS No. Not Applicable)
4. Yeast (CAS No. 68876-77-7)

The product is considered a soil amendment (rather than a fertilizer) because it has no nutrient content. It has a pH range of 7.5 to 8.2.

Nitrogen Trifecta System / NTS

Description of the NTS Product: Agricen has constructed a pilot system for its proprietary and patent-pending Nitrogen use efficiency product (called “NTS” in this document). This non-hazardous biostimulant product is produced via a fermentation process to achieve a final product with a volume that is greater than 99% water with a less than 1% microbial consortium that includes three proprietary microbes. These microbes have been proven to assist with Nitrogen use efficiency in plants, and growers will be able to use the technology in row crops as a sustainable solution to better utilize their traditional Nitrogen fertilizers.

Overview of the NTS Manufacturing Process:

The NTS production process utilizes a continuous flow closed system consisting of a series of plug-flow, fluidized bed reactors with a targeted retention time of approximately 14 days. The pilot system has a working volume of 6,000 gallons, almost all of which is water.

The inputs are as follows:

1. Water (CAS No. 7732-18-5)
2. Proprietary Organic Microbial Consortium (CAS No. Not Applicable)
3. Soy Flour (CAS No. 68513-95-1)
4. Glucose (CAS No. 50-99-7)
5. Malic Acid (CAS No. 6915-15-7)
6. Ammonium Sulfate (CAS No. 7783-20-2)

7. 15% Sodium Hydroxide Solution (CAS No. 1310-73-2)

The NTS process starts with two feedstocks – a proprietary organic microbial consortium (PSC) and Soy Flour. To facilitate the fermentation process, there is a daily addition of carbon sources and a nitrogen source. The pH of the process is monitored and up to 1.5 gallons of a 3.75M (15%) Sodium Hydroxide (NaOH) solution can be added as necessary to maintain the pH above 6.4. Agricen will plan to store an average daily volume of 10 gallons of the 15% NaOH solution. As the system matures and pH becomes more consistent, Agricen anticipates that it will need less than 1.5 gallons per day of NaOH.

The organic inputs are fully consumed during the process, leaving behind the final NTS product. The product is regulated as a soil amendment (rather than a fertilizer) because it has no nutrient content. It consists solely of water and the microbial consortium and has a pH range of 7.5 to 8.5.

Agricen stores UnFoamer, a silicone-based surfactant that helps defoam products that might foam when agitated. Agricen typically stores approximately 100 gallons of UnFoamer. Agricen also stores Proxel GXL for possible use as a preservative. It typically stores approximately 400 gallons of Proxel GXL.

Agricen utilizes two different mixtures to clean and maintain its RO system in 5001 N Dakota Ln: RoClean L403 and RoClean P111. Agricen typically stores approximately 25 gallons of RoClean L403 and 50 gallons of RoClean P111.

5071 Dakota Lane Project Narrative

This specific use permit ("SUP") request is to allow for a High-Impact Manufacturing uses at 5071 Dakota Lane Denton, Texas 76207 (the "Property"). The Property is located within the city limits and is approximately 3.23 acres. The Property is currently developed as warehouse/office uses as indicated by the current Certificate of Occupancy. The current plat was filed with Denton County on May 28, 2008 and the Property will not be replatted.

The SUP is required to bring the Property into compliance with the Denton Development Code for the production of an agricultural fertilizer. That said, Agricen will not produce any products at the Property. Instead, it utilizes the Property to store (a) empty totes, (b) raw materials to be used in Agricen's other buildings to produce biostimulant products, and (c) finished biostimulant product in totes. Biostimulants are nonhazardous and sustainable biostimulant products used by farmers alongside their traditional fertilizer to enhance nutrient use efficiency in their crops and increase crop yield.¹

According to the City of Denton Zoning Map, the Property is currently zoned heavy industrial; land to the north, south, east, and west is also zoned as heavy industrial. Surrounding land is either undeveloped or developed with industrial uses compatible with the proposed high-impact manufacturing use.

The Property is generally level with little to no grade change. The Property is located northeast of Hickory Creek but not within a floodplain. The Property will maintain the existing adequate parking and space for vehicle maneuvering throughout the site. Because the site and its surroundings are used for industrial manufacturing, no open space, recreation, or preservation areas exist on site. Existing utilities on the Property are present to accommodate industrial manufacturing uses and will be maintained for efficient operation of the proposed use. Proper water, wastewater, storm water, solid waste, and electrical standards will be maintained on the Property for the proposed use.

We are committed to adhering to all local, state, and federal laws and requirements associated with the proposed high-impact manufacturing use. The applicant has received the current No Exposure Certification for the Property effective April 4, 2024 and will apply for and maintain all necessary permits associated with the proposed use including, but not limited, to the hazardous materials permit. Agricen will ensure that all necessary infrastructure required to maintain safe and effective operation of the Property and the proposed high-impact manufacturing use will be provided and consistently maintained, in accordance with any and all requirements of the City of Denton and the Denton Development Code.

As mentioned briefly above, the proposed use for the Property is consistent with the surrounding industrial uses. The Property is compatible with the Denton 2040 Comprehensive Plan which designates the Property as Industrial Commerce defined as locations "where the predominant uses include both light and heavy industrial uses, such as moderate to heavy

¹ See summary of totes, raw materials and finished products to be stored at 5071 Dakota Lane, attached herein as Exhibit A.

manufacturing, assembly, fabrication, and wholesaling." The specific use proposed has little to no impact on the future development of the area primarily because it is consistent with the existing and surrounding uses and does not prohibit or hinder further development of any surrounding sites. We will ensure that the proposed high-impact manufacturing use and associated Property will meet and continue to meet all standards of the Denton Development Code and all other applicable codes of the City of Denton.

The proposed use will not materially alter the existing access, traffic, emergency services, utilities, parking, refuse areas, noise, glare, and/or odor currently provided or emitted from the Property and its existing use. Should any alterations occur, we are committed to remedying any impacts. As shown in the provided materials with our SUP application, Agricen is committed to maintaining the highest standard of safety throughout its facilities and the surrounding area. Agricen is majority owned by Loveland Products, Inc., the proprietary products arm of the largest North American agricultural retailer, Nutrien Ag Solutions. As such, it follows Nutrien's broad and rigorous safety standards. Provided in the revised resubmittal are samples of that broad safety program. Through the implemented safety measures, any potential adverse impacts to the health, safety, and welfare of the employees, inhabitants of the area, and the City of Denton as a whole have been mitigated and/or eliminated.

Exhibit A

Product and Raw Material Storage at 5071 Dakota Lane

Agricen utilizes its property at 5071 Dakota Lane as a storage facility for empty totes, raw materials for use in other production facilities to produce biostimulant products, and finished biostimulant products.

Utilizing a racking system, Agricen currently has the capacity to store up to 2,000 empty 275 gallon totes and 400 empty 135 gallon totes. These totes will then be filled with finished biostimulant product to be shipped out to customers.

Agricen stores raw materials to be used in production systems housed in its other buildings or in finished product blends. These production systems produce non-hazardous biostimulants. Agricen anticipates it could currently store up to the following amounts:

- 45,000 lbs of Leonardite: used as an input to Agricen production systems
- 40,000 lbs of Rock Phosphate: used as an input to Agricen production systems
- 26,000 lbs of two different types of kelp powder: used as inputs to Agricen production systems
- 26,000 gallons of Organic Potassium Fertilizer (Pro-K): used in blends for Agricen finished products
- 7,500 gallons of Protein Hydrolysate (Lisiveg): used in blends for Agricen finished products
- 4,500 gallons of Glycerin: used in blends for Agricen finished products
- 3,000 gallons of Proxel GXL: used as a preservative in some Agricen finished products

Finally, Agricen stores filled totes of its biostimulant products as products await shipment. Agricen anticipates that it could currently store up to 105,000 gallons of finished product.