

PREPARED FOR THE PLAN COMMISSION



Project Address: 7102 US Highways 12 and 18 – Rodefeld Landfill
Application Type: Alteration to Approved Planned Development
Legistar File ID # [50230](#)
Prepared By: Timothy M. Parks, Planning Division
Report includes comments from other City agencies, as noted.

Summary

Applicant: Dane County Public Works Department–Solid Waste Division; 1919 Alliant Energy Center Way; Madison; John Welch, representative.

Property Owners: Dane County and City of Madison.

Requested Action: Approval of an alteration to an approved Planned Development Specific Implementation Plan to allow construction of a biogas treatment and distribution facility at Dane County Rodefeld Landfill, generally addressed as 7102 US Highways 12 and 18.

Proposal Summary: Dane County is seeking approval to construct a compound containing freestanding equipment and small equipment buildings along the southerly edge of Rodefeld Landfill that will be used to clean and distribute methane gas generated by the landfill into an existing natural gas pipeline that runs through the County property. The facility will also accept natural gas generated from off-site sources (digesters, etc.), which will be trucked to the landfill privately and discharged into the proposed system. The County wishes to commence construction of the new facility as soon as all regulatory approvals have been granted, with completion scheduled for December 2018.

Applicable Regulations & Standards: Section 28.098(6) requires that requests to alter a Planned Development District shall be made to the Director of Planning and Community and Economic Development to determine if the request constitutes a major or minor alteration to the Planned Development District. Major alterations may be approved by the Plan Commission if the requested alterations are consistent with the concept approved by the Common Council. Major alterations that represent a substantial departure from the concept approved by the Common Council shall be approved only after all of the procedures in Section 28.098(5) have been satisfied. The Director may refer any request for alteration to the Urban Design Commission for an advisory recommendation.

Review Required By: Urban Design Commission and Plan Commission.

Summary Recommendation: The Planning Division recommends that the Plan Commission **approve** an alteration to the approved Planned Development for Rodefeld Landfill at 7102 US Highway 12 and 18 to allow construction of a biogas treatment and distribution facility subject to input at the public hearing and the conditions from reviewing agencies beginning on page 4 of this report.

Background Information

Parcel Location: Rodefeld Landfill currently comprises approximately 217 acres of land that generally extends along the north side of US Highway 12 and 18 from Long Road on the west to CTH AB on the east. The County also leases a portion of a 9.5-acre City-owned parcel operated by the Streets Division at the southeastern corner of

the landfill adjacent to the intersection of US Highway 12 and 18 and CTH AB. The landfill is located in Aldermanic District 16 (DeMarb) and partially within the Madison Metropolitan School District and McFarland School District.

Existing Conditions and Land Use: The overall 217-acre Rodefeld property is zoned PD and includes the 105-acre landfill, 21,776 square-foot waste transfer building, 4,500 square-foot Clean Sweep building, numerous gas-to-energy buildings, truck scale, fueling facility, and an operations building. The City’s Streets Division property (7401 US Highway 12 and 18) is also zoned PD as part of the landfill district.

Surrounding Land Uses and Zoning:

North: McAllen 120 Business Park located in the City of Madison, zoned IL (Industrial–Limited District); Suter’s Speed Shop and undeveloped lands in the Town of Blooming Grove;

South: Yahara Hills Golf Course across US Highway 12 and 18 in the City of Madison, zoned CN (Conservancy District);

West: America’s Best Value Inn, located in the Town of Blooming Grove;

East: Dane County Medical Examiner and Dane County Highways and Transportation maintenance facilities, single-family residences on town parcels, mini-storage warehouses, and undeveloped land located in the Town of Cottage Grove east of CTH AB.

Adopted Land Use Plans: The 2006 Comprehensive Plan identifies all of Rodefeld Landfill and the two City-owned parcels for Park and Open Space uses. Map Note #24 acknowledges the existing use as an active landfill and recommends that the landfill become open space after it is closed.

The 2017 Yahara Hills Neighborhood Development Plan acknowledges that the landfill has an estimated capacity of 15 to 20 years and notes that there are no plans to expand the facility to the north or east. However, Dane County has indicated that if the CTH AB interchange is relocated further east of its current intersection with US Highways 12 and 18 that an eastern expansion of the landfill could occur in the long-term. Further, if the current access to the landfill is closed, a new scale may be located on the north side of the facility accessed from CTH AB. The recommended long-term use of the landfill is Open Space in the neighborhood development plan. However, the existing recycling and waste transfer buildings on the site are designated Civic and Institutional uses.

Zoning Summary: The site is zoned PD. The project will be reviewed in the following sections.

Other Critical Zoning Items	
Yes:	Urban Design (PD zoning, public facility), Wetlands, Utility Easements, Barrier Free
No:	Wellhead Protection, Waterfront Development, Landmark, Adjacent to a Park
<i>Prepared by: Jenny Kirchgatter, Asst. Zoning Administrator</i>	

Environmental Corridor Status: The landfill is not located within the Central Urban Service Area but is located in a Limited Service Area. The northern and western edges of the landfill are located in a mapped environmental corridor due to the presence of wetlands on those portions of the property.

Public Utilities and Services: City water and sanitary sewer facilities are located along the westernmost edge of the landfill property, and the waste handling and operations buildings are served by City water. There is no water or sewer service available to the eastern half of the property.

Previous Approvals

On April 3, 1992, the Common Council conditionally approved a request by Dane County to rezone approximately 162 acres of land generally located in the 6700- through 7100-blocks of US Highway 12 and 18 from Temp. A (Agriculture District), C (Conservancy District) and PUD-SIP to Amended PUD-GDP [1966 Zoning Code] to allow the future vertical and horizontal expansion of Rodefild Landfill, including on 68 acres of land purchased from the City, and on land annexed from the Town of Blooming Grove in 1991.

On October 4, 1994, the Common Council conditionally approved a request by Dane County to rezone the approximately 162 acres from Temp. A (Agriculture District), C (Conservancy District), PUD-GDP and PUD-SIP to PUD-SIP to complete the vertical and horizontal expansion of Rodefild Landfill and to provide a 6.4-acre buffer zone required by the Wisconsin Department of Natural Resources as part of its approval of the landfill expansion. A series of minor alterations have been approved since this SIP was approved to incorporate various small buildings into the site and to provide additional screening along the edges of the County property.

On February 8, 2010, the Plan Commission approved an alteration to the Rodefild Landfill Planned Development to allow construction of a combined waste transfer and household hazardous waste facility.

On May 6, 2014, the Common Council approved a request to rezone Rodefild Landfill from Temp. A (Agricultural District), CN (Conservancy District) and PD (Planned Development District) to expand the Planned Development district, and approved a General Development Plan and Specific Implementation Plan to allow expansion of the landfill.

Project Description

Dane County is requesting Plan Commission approval of an alteration to the Planned Development District for Rodefild Landfill at 7102 US Highways 12 and 18 to construct and operate a biogas cleaning facility along the southern edge of the 217-acre overall landfill facility. The proposed facility will pump cleaned methane gas primarily generated by the landfill into an existing natural gas distribution pipeline that runs north-south through the property.

The biogas cleaning facility will be located in a fenced enclosure to be located adjacent to the eastern of two entrances into the landfill from US Highways 12 and 18. The facility will consist of gas cleaning equipment placed on a 24,340 square-foot pad located at the center of the enclosure and a series of small one-story metal buildings (the largest being 2,520 square feet), which will house compressors, electrical components, metering, monitoring, and reporting equipment. Processed gas will ultimately be used locally by Dane County for renewable compressed natural gas (CNG) vehicle fuel or injected into the pipeline and sold to CNG stations elsewhere. The proposed facility will include an off-loading station on the western end of the compound, which will allow off-site sources of biogas, such as local digesters, to bring biogas to this facility for off-loading into the pipeline. A sliding gate is proposed at the western end of the compound to provide access to the biogas facility. Images of the similar equipment and buildings from another biogas facility have been provided with the application materials.

Most of the proposed facility will be screened from view from US Highways 12 and 18 by the southern half of an existing dense grove of woods and berm located on the City-owned property that sits between the southern edge of the landfill and highway right of way. The northern half of the same grove located on the County's property will

be removed to accommodate the facility. Two desulfurization vessels will stand above the rest of the buildings and equipment in the facility compound, and will be partially visible from both US Highways 12 and 18 and from CTH AB along the eastern edge of the landfill property according to renderings provided by the County with the application materials.

New plantings for the facility will be limited to four trees and seventeen shrubs to be installed at the entrance to the compound from the landfill driveway (see Sheet L101). However, the County has planted numerous trees along the southern and eastern edges of the landfill over the last fifteen years to augment the older growth vegetation located in tree groves like the one located between the proposed biogas facility and US Highways 12 and 18 and develop a vegetative screen for the overall facility. In addition, an arborist's report has been submitted with the application materials that provides an assessment of the trees in the grove that will remain on the City's property, which indicates that the stand of trees is both diverse and healthy.

Analysis and Conclusion

Planning and Zoning staff believe that the proposed biogas treatment and distribution facility is consistent with the Planned Development zoning approved by the Common Council for Rodefeld Landfill. The proposed use is consistent with other waste-to-energy facilities located elsewhere on the 217-acre site. However, given the size and prominent location of the proposed facility, staff felt that it would be appropriate to refer approval of the alteration to the Plan Commission for consideration. Staff believes that the new facility is generally well designed and comports to the larger purpose of the PD zoning for Rodefeld Landfill, which was originally established circa 1985 and subsequently amended to provide a unified plan for building placement, access and operation for the overall landfill complex.

Staff also believes that the new facility can be adequately screened from view from the south. However, staff requests that the plans be revised to include information on trees located further east of the grove of trees along the berm parallel to US Highways 12 and 18. While that grove will provide the primary screening from the highway, staff wishes to ensure that there will be as nearly a continuous line of vegetation to screen the facility as possible.

The Urban Design Commission reviewed the proposed facility and granted final approval with no conditions on March 7, 2018.

Recommendation

Planning Division Recommendation (Contact Timothy M. Parks, 261-9632)

The Planning Division recommends that the Plan Commission **approve** an alteration to the approved Planned Development for Rodefeld Landfill at 7102 US Highway 12 and 18 to allow construction of a biogas treatment and distribution facility subject to input at the public hearing and the following conditions:

Recommended Conditions of Approval Major/Non-Standard Conditions are Shaded

1. That the applicant submit a final landscaping and screening plan for this portion of Rodefeld Landfill for approval by the Director of the Planning Division prior to final approval and recording of the alteration that ensures the proposed biogas facility will be adequately screened from US Highways 12 and 18. In particular,

the final plans shall note the location of existing trees along the southern boundary east of the stand of trees located on the City parcel so that any additional trees needed to provide a strong and continuous screen for the facility may be added to the final approved plans.

The following conditions of approval have been submitted by reviewing agencies:

City Engineering Division (Contact Brenda Stanley, 261-9127)

2. The proposed discharge processed leachate needs to meet both the City of Madison and Madison Metropolitan Sewerage District's (MMSD) discharge criteria (Chapter 35 of Madison General Ordinances). The applicant will need to submit the list of the expected chemical constituents and pH levels to Ralph Erickson from MMSD, ralphe@madsewer.org and provide evidence of MMSD approval of proposed discharge prior to plan signoff.
3. All outstanding Madison Metropolitan Sewerage District (MMSD) charges are due and payable prior to City Engineering Division sign-off, unless otherwise collected with a Developer's/ Subdivision Contract. Contact Mark Moder (261-9250) to obtain the final MMSD billing a minimum of two (2) working days prior to requesting City Engineering signoff.
4. This project falls in the area subject to increased erosion control enforcement as authorized by the fact that it is in a TMDL ZONE. The project will be expected to meet a higher standard of erosion control than the minimum standards set by the WDNR in order to comply with TMDL limits.
5. The applicant shall submit, prior to plan sign-off, a digital CAD file (single file) to the City Engineering Division. The CAD file shall be in a designated coordinate system (preferably Dane County WISCRS, US Ft). The single CAD file submittal can be either AutoCAD (dwg) Version 2013 or older, MicroStation (dgn) V8i Select Series 3 or older, or Universal (dxf) format and shall contain the only the following data, each on a separate layer name/level number. The digital copies shall be drawn to scale and represent final construction including: building footprints; internal walkway areas; internal site parking areas; other miscellaneous impervious areas (i.e. gravel, crushed stone, bituminous/asphalt, concrete, etc.); right-of-way lines (public and private); plat name and lot lines (metes & bounds parcel lines if unplatted); platted lot numbers (noted "unplatted lands" if not platted); lot/plat property dimensions; street names; private on-site sanitary sewer utilities (including all connections to public sanitary); private on-site storm sewer utilities (including all connections to public storm). All other levels (contours, elevations, etc.) are not to be included with this file submittal. E-mail CAD file transmissions are preferred to: bstanley@cityofmadison.com (East) or ttroester@cityofmadison.com (West). Include the site address in the subject line of this transmittal. Any changes or additions to the location of the building, sidewalks, parking/pavement, private on-site sanitary sewer utilities, or private on-site storm sewer utilities during construction will require a new CAD file.
6. The applicant shall submit, prior to plan sign-off but after all revisions have been completed, digital PDF files to the Engineering Division. Email PDF file transmissions are preferred to: bstanley@cityofmadison.com (East) or ttroester@cityofmadison.com (West). The digital copies shall be to scale, and shall have a scale bar on the plan set. (POLICY and MGO 37.09(2)) PDF submittals shall contain the following information: a) Building Footprints; b) Internal Walkway Areas; c) Internal Site Parking Areas; d) Other Miscellaneous Impervious Areas (i.e. gravel, crushed stone, bituminous/asphalt, concrete, etc.); e) Right-of-Way lines (public and private); f)

Lot lines or parcel lines if unplatted; g) Lot numbers or the words unplatted; h) Lot/Plat dimensions; i) Street names; j) Stormwater Management Facilities; k) Detail drawings associated with Stormwater Management Facilities (including if applicable planting plans).

7. The applicant shall submit prior to plan sign-off, electronic copies of any Stormwater Management Files including: a) SLAMM DAT files; b) RECARGA files; c) TR-55/HYDROCAD/Etc; d) Sediment loading calculations. If calculations are done by hand or are not available electronically the hand copies or printed output shall be scanned to a PDF file and provided.
8. This project appears to require construction dewatering. A dewatering plan shall be submitted to the City Engineering Division as part of the Erosion Control Permit application and plan. If contaminated soil or groundwater conditions exist on or adjacent to this project additional Wisconsin Department of Natural Resources (WDNR), Public Health Madison-Dane County, and/or City Engineering approvals may be required prior to the issuance of the required Erosion Control Permit.
9. Submit a draft Stormwater Management Maintenance Agreement (SWMA) for review and approval that covers inspection and maintenance requirements for any BMP used to meet stormwater management requirements on this project. Include copies of all stormwater, utility, and detail plan sheets that contain stormwater practices on 8.5x14-inch paper in the draft document. These drawings do not need to be to scale as they are for informational purposes only. Once City Engineering staff have reviewed the draft document and approved it with any required revisions submit a signed and notarized original copy to City Engineering. Include a check for \$30.00 made out to Dane County Register of Deeds for the recording fee. City Engineering will forward the document and fee for recording at the time of issuance of the stormwater management permit. Draft document can be emailed to Tim Troester (west) at ttroester@cityofmadison.com, or Jeff Benedict at jbenedict@cityofmadison.com final document and fee should be submitted to City Engineering.
10. The applicant shall demonstrate compliance with Section 37.07 and 37.08 of Madison General Ordinances regarding permissible soil loss rates. The erosion control plan shall include Universal Soil Loss Equation (USLE) computations for the construction period. Measures shall be implemented in order to maintain a soil loss rate below 5.0-tons per acre per year.
11. This site appears to disturb over one (1) acre of land and requires a permit from the Wisconsin Department of Natural Resources (WDNR) for stormwater management and erosion control. The City of Madison has been required by the WDNR to review projects for compliance with NR-216 and NR-151, however a separate permit submittal is still required to the WDNR for this work. The City of Madison cannot issue our permit until concurrence is obtained from the WDNR via their NOI or WRAPP permit process. Contact Eric Rortvedt at 273-5612 of the WDNR to discuss this requirement.
12. This project will require a concrete management plan as part of the erosion control plan to be reviewed and approved by the City Engineer's Office.
13. Prior to approval, this project shall comply with Chapter 37 of Madison General Ordinances regarding stormwater management. Specifically, this development is required to detain the 2-, 10-, and 100-year storm events, matching post development rates to predevelopment rates.

14. Prior to approval, this project shall comply with Chapter 37 of Madison General Ordinances regarding stormwater management. Specifically, this development is required to reduce TSS by 80% (control the 5-micron particle) off of newly developed areas compared to no controls.
15. Prior to approval, this project shall comply with Chapter 37 of Madison General Ordinances regarding stormwater management. Specifically, this development is required to provide infiltration in accordance with Chapter 37 of Madison General Ordinances.
16. Complete an erosion control plan and complete weekly self-inspection of the erosion control practices and post these inspections to the City of Madison website as required by Chapter 37 of Madison General Ordinances.
17. Prior to approval, this project shall comply with Chapter 37 of Madison General Ordinances regarding stormwater management. Specifically, this development is required to provide oil/grease control in accordance with Chapter 37 of Madison General Ordinances.

City Engineering Division–Mapping Section (Contact Jeff Quamme, 266-4097)

18. The truck turnaround area, fill and stormwater basin lie within City of Madison lands leased to Dane County per Document No. 5078421. The lease provides for uses that are associated with the County's operation of the landfill. The lease can be terminated by the City if the Wisconsin DOT determines the lands are needed for transportation purposes. These improvements within the lease area are important elements for the operation of this proposed facility. The applicant shall work with the City Engineer and Office of Real Estate Services to amend the current lease with conditions and restrictions providing assurance that the City's and County's interests are adequately addressed.
19. Buildings on this site are numbered. The maintenance building is building 9, blower building is building 10, ring metering building is building 11, boiler building is building 12. The site plan shall reflect a proper street address of the property as reflected by official City of Madison Assessor's and Engineering Division records.

Traffic Engineering Division (Contact Eric Halvorson, 266-6527)

20. The applicant shall submit one contiguous plan showing proposed conditions and one contiguous plan showing existing conditions for approval. The plan drawings shall be scaled to 1" = 20' and include the following, when applicable: existing and proposed property lines; parcel addresses; all easements; pavement markings; signing; building placement; items in the terrace such as signs, street light poles, hydrants; surface types such as asphalt, concrete, grass, sidewalk; driveway approaches, including those adjacent to and across street from the project lot location; parking stall dimensions, including two (2) feet of vehicle overhang; drive aisle dimensions; semitrailer movement and vehicle routes; dimensions of radii; and percent of slope.
21. The developer shall post a security deposit prior to the start of development. In the event that modifications need to be made to any City owned and/or maintained traffic signals, street lighting, signing, pavement marking and conduit/handholes, the developer shall reimburse the City for all associated costs including engineering, labor and materials for both temporary and permanent installations.

22. The City Traffic Engineer may require public signing and marking related to the development; the developer shall be financially responsible for such signing and marking.

23. All parking facility design shall conform to the standards in MGO Section 10.08(6).

Zoning Administrator (Contact Jenny Kirchgatter, 266-4429)

24. Per Section 28.186(4)(b), the property owner or operator is required to bring the property into compliance with all elements of the approved site plans by the date established by the Zoning Administrator as part of the site and building plan approval. Work with Zoning staff to establish a final site compliance date.

Fire Department (Contact Bill Sullivan, 261-9658)

This agency submitted a response with no comments or conditions for this request.

Water Utility (Contact Adam Wiederhoeft, 266-9121)

25. All private wells located in the City of Madison require a Well Operation Permit issued by Madison Water Utility in accordance with MGO Section 13.21. The proposed well and pump installation must be done in accordance with Chapter NR-812 of the Wisconsin Administrative Code and will be require water quality sampling to demonstrate that bacteriologically safe is produced. Permits are valid for 5 years and are renewable. Permit applications must include the \$355 fee which covers the cost of a state mandated inspection and required water quality tests. The property owner is required to submit annual test results for total coliform and nitrate by October 1 of each year the permit is valid. Well permits are non-transferable; new owners must obtain a permit in their name. Additional information may be found on the Water Utility's private well information page (<http://www.cityofmadison.com/water/water-quality/private-wells/>).

Metro Transit (Contact Tim Sobota, 261-4289)

This agency submitted a response with no comments or conditions for this request.

Parks Division (Contact Kathleen Kane, 261-9671)

This agency submitted a response with no comments or conditions for this request.