

NEW MEXICO ENVIRONMENT DEPARTMENT

GROUND WATER QUALITY BUREAU

PUBLIC INVOLVEMENT PLAN (PIP)



| Facility Name: | Outlook Dairy | |
|----------------|---------------|--|
| | | |

Facility Location: 303 State Highway 83, Lovington

Sections 4, 8, and 9, T15S, R37E

County: Lea County

Responsible Party: Issak Bos, Owner

Outlook Dairy

303 State Highway 83 Lovington, NM 88260

Agency: Ground Water Quality Bureau

Name of Bureau Section

GWQB Action: Permitting – Renewal

DP-1302

Bureau Contact: Sarah F. Schnell, Geoscientist

(505) 660-8368

sarah.schnell@ state.nm.us or acs.general@state.nm.us

Main bureau telephone number:

(505) 827-2900

EFFECTIVE DATE: September 2, 2022

REVISION DATE: N/A

For heatin D. Boll, Chief

For Justin D. Ball, Chief Ground Water Quality Bureau

Element 1 – Public Involvement Plan (PIP) Overview

The New Mexico Environment Department (NMED or Department), Ground Water Quality Bureau (Bureau) has developed this PIP for the application for renewal of the Ground Water Discharge Permit for Outlook Dairy. The permit for this facility is referred to as DP-1302.

The purpose of this PIP is to plan for providing public participation opportunities and information that may be needed for the community to participate in the permitting process for this facility. This PIP identifies information about the community and resources needed by the Bureau to incorporate community participation activities into the decision-making process. This PIP is developed in accordance with the Department's *Public Participation Policy* (Policy 07-13 or Policy), and incorporates the requirements of the Policy, as well as applicable regulatory and statutory public participation requirements.

This PIP implements the "elements" set forth in the Policy. Those elements include:

- 1. An overview of the Public Involvement Plan for the community affected by the activity
- Bureau contact names and contact information, specifically for Limited English Proficiency (LEP) language assistance services (e.g., translation, interpreters) or for disability accommodations
- 3. A summary of the regulatory public participation framework associated with discharge permits
- 4. A description of community/stakeholder groups based on results of a preliminary environmental justice (EJ) screening
- 5. Details about planned public outreach activities

In developing this PIP, community participation needs were assessed to ensure appropriate public outreach. This was accomplished by identifying whether there is a combination of environmental and demographic factors that may impact public participation (e.g., low income community, minority community, LEP individuals, linguistically isolated households). Because the community located near the Outlook Dairy includes a significant percentage of Spanish speakers, the Bureau will provide appropriate information in both English and Spanish.

Public involvement associated with discharge permits occurs at different stages and in different forms. Public involvement activities required by statute or regulation are mandatory and subject to statutory or regulatory deadlines. Mandatory public involvement activities and associated time requirements relevant to this PIP are noted in the *Table of Mandated Public Involvement Activities* at the end of this PIP.

The Bureau plans to conduct the public involvement activities related to the permitting process outlined in the *Table of Public Involvement Activities* below. The activity timeline and dates are tentative and subject to change.

Table of Public Involvement Activities

| Activity | Date |
|--|---|
| Application Notice (PN-1) See Table of Mandated Public Involvement Activities at the end of this PIP for details. | December 2021 |
| Placement of a hardcopy of the PIP in the local NMED office: NMED Hobbs Office 2120 N. Alto Hobbs, NM 88240 Phone (575) 397-6910 | September 2022 |
| Notice of availability of draft permit (PN-2) See Table of Mandated Public Involvement Activities. | Within 60 days of determining the application is technically complete. September 2022 (anticipated) |

All notices for upcoming meetings or hearings will include a statement that any person who requires assistance, an interpreter, or an auxiliary aid to participate in the process may contact a specifically identified Department person to request those services. Requested interpretation services during the meeting and accommodations or services for persons with disabilities will be arranged to the extent possible.

This PIP is a "living" document that may be amended for numerous reasons, including the consideration of public comments and feedback.

Element 2 – Bureau Contact Information

PIP Specific Contacts

The Bureau contact for this discharge permit is:
Sarah F. Schnell, Geoscientist
NMED Ground Water Quality Bureau
P.O. Box 5469, Santa Fe, NM 87502-5469
505-827-2900 / acs.general@state.nm.us

Non-English Language Speaker Assistance

All public notices will contain a statement that non-English speakers may call the Bureau contact listed above and request language assistance in order to learn more about this permit or the permitting process. Arrangements may be made for document translation or interpretation related to the permitting process as necessary and as resources allow.

Individuals with Disabilities Assistance

All public notices will contain a statement that individuals with disabilities may call the Bureau contact listed above and request assistance needed to participate in activities associated with the permitting process.

The following information will be provided in public notices so that individuals who are deaf, hard of hearing, or have difficulty speaking on the phone can contact the Bureau and ask questions about the activity or proceeding: Telephone conversation assistance is available through Relay New Mexico at no charge for people who are deaf, hard of hearing, or have difficulty speaking on the phone, by calling 1-800-659-1779 (English); 1-800-327-1857 (Spanish); TTY users: 1-800-659-8331.

Websites

Outreach materials and notices will include links to the following website, where the Bureau's public notices and PIP information are posted:

Ground Water Quality Bureau – https://www.env.nm.gov/public-notices/

Element 3 – Regulatory Framework for Public Participation Related to the Permitting Process

The public participation regulatory framework associated with the permitting process is identified in the *Table of Mandated Public Involvement Activities* at the end of this PIP. The Table identifies activities subject to statutory or regulatory deadlines, the associated regulatory requirements, and the associated dates or time periods.

Element 4 – Description of Community/Stakeholder Groups Based on the EJSCREEN

EJSCREEN Summary

To provide for adequate public participation opportunities and meaningful involvement of persons in the permitting process, the affected communities must first be identified, informed about proposed environmental actions affecting the community, and invited to share their comments and concerns. The EJSCREEN tool developed by the U.S. Environmental Protection

Page | 3 DP-1302 PIP-LEP

Agency (EPA) helps identify communities that are low income, have minority populations, and have limited English proficiency that may benefit from a variety of approaches for notification and outreach communication. This information is used to help plan for the community's involvement in the public process for environmental activities or actions. In addition to the EJSCREEN results, the Bureau may consider additional information such as the U.S. Census Bureau website or NMED's EJ Mapping Tool.

The Bureau considers the affected community to be those persons living within a 4-mile radius of the discharge site. The results of the EJSCREEN American Community Survey (ACS) Summary Report (attached to this PIP) are summarized in the table below.

EJSCREEN Results for the Affected Community

| | <u>, </u> |
|---|---|
| Total population | 142 |
| Total number of households | 47 |
| Percentage minority population | 50% |
| Percentage Hispanic population | 50% |
| Percentage of the population by race | Population reporting one race: White:95% Some Other Race:2% |
| Total number of persons greater than the age of five who speak English "less than very well" | 24 |
| Percentage of persons greater than the age of five who speak English "less than very well" | 18% |
| Total number of linguistically isolated households | 4 |
| Percentage of linguistically isolated households (Total number of linguistically isolated households ÷ total number of households) X 100 | 9% |
| Languages by percentage in linguistically isolated households | Spanish:100% |
| Percent linguistically isolated population, New Mexico*: | 5.1% |
| Per capita income | \$31,508 |
| Per capita income, USA** | \$35,384 |

^{*} U.S. Census Bureau. 2020 American Community Survey 5-Year Estimates, Table S1602. Limited English-Speaking Households.

https://data.census.gov/cedsci/table? q=S1602%3A%20LIMITED%20ENGLISH%20SPEAKING%20HOUSEHOLDS&g=0400000US35&tid=ACSST5Y2020.S1602 (date of access: <math>5/4/2022).

https://data.census.gov/cedsci/table? q=per%20 capita%20 income&tid=ACSDT5Y2020.B19301.~(Date of access: 5/4/2022).

^{**} U.S. Census Bureau. 2020 American Community Survey 5-Year Estimates, Table B19301. Per Capita Income in the Past 12 Months (In 2020 Inflation-Adjusted Dollars).

The EJSCREEN results indicate that for the affected community the proportion of the population with limited English proficiency (LEP) is significant, and that the predominant non-English language is Spanish. The Bureau has therefore performed a LEP assessment for the community and attaches that assessment to this PIP.

Because the affected community has a significant percentage of persons with difficulties communicating in English, the Bureau will consider the language and communication needs of this community when conducting public outreach and participation activities. To accomplish this the Bureau, to the extent its budget and time limitations allow, will provide the same information in Spanish as in English in public comment notices, public meeting notices, and other announcements (e.g., radio broadcasts, brochures, signs, postcards) and will strive to make public participation efforts as inclusive as possible. See Element 5 for more specifics on the public outreach and participation activities.

Element 5 – Detailed Actions and Outreach Activities with the Affected Public

Public involvement activities required by statute or regulation for this permitting action are listed in the *Table of Mandated Public Involvement Activities* at the end of this document.

Public Participation – Outreach Activities

The Bureau will conduct the following outreach activities during this permitting process:

- Placement of this PIP on the Bureau website and in nearby NMED field office
- Postal mailing and email notices
- Newspaper notices
- Notice posted on NMED website

Newspapers to be utilized in the notification process include:

- Statewide circulation (English): Albuquerque Journal
- Local circulation (English and Spanish): Lovington Daily Leader- Lea County

Local, state, and federal government agencies, tribal entities, land grant officials and colonias will be notified about the permitting process. A list of the agencies and officials notified can be provided upon request.

Indian Tribes, Pueblos and Nations will be notified about the permitting action through the contacts maintained by the Indian Affairs Department at the following URLs:

https://www.iad.state.nm.us/pueblo-tribes-and-nations/pueblos/ https://www.iad.state.nm.us/pueblo-tribes-and-nations/navajo/ https://www.iad.state.nm.us/pueblo-tribes-and-nations/apaches/ Timelines and methods for submitting public comments are specified in the *Table of Mandated Public Involvement Activities*. Final discharge permit documents will be available from the Bureau's contact identified in Element 2 of this PIP.

Postal Mailing or E-Mailing of Notices to Persons on the Facility-Specific Mailing List

The Bureau solicits the names and contact information of interested parties with all public notices. The Bureau maintains those names on a Facility-Specific Mailing List and provides the individuals with information about regulatory activities for the facility. Individuals, organizations, and other interested parties are added to the mailing list as requested. All public notices will contain a statement directing interested individuals to contact the Bureau contact for this permit if they want to be added to the facility specific mailing list.

Other means of outreach such as fliers announcing public comment periods and/or public meetings or hearings may be posted in locations throughout the community (e.g., local businesses, schools, libraries) and on the Department's website, at the Bureau's discretion after consideration of public interest and input.

PIP Contingency Plan

During a public health emergency or other unforeseen event outside the control of the Department, the Department will make every effort to ensure the public remains involved in and informed of the decision making and permit processes. The purpose of this PIP Contingency Plan is in part to address circumstances when public spaces are closed because of potential human exposure risks. The Department will attempt to identify and utilize alternate methods of document delivery to the public and public viewing when conventional methods and locations are unavailable. When it is unsafe to utilize the physical PIP and document repositories, the Department will consider utilizing electronic delivery methods deemed appropriate for the permitting action. While operating under the PIP Contingency Plan, the PN-2 will include a statement specifying that the PIP Contingency Plan is in effect and that, "instead of placing a copy of the PIP for this permitting action in a public location, NMED will make the PIP available to the community by sending the PIP by email or US mail to any community member requesting a copy. An individual may request a copy of the PIP utilizing the Bureau contact information in this public notice. When making such a request, please specify how you would like the document delivered. If you request a copy of a PIP, you will receive a revised PIP should the PIP be updated in the future." During the times of potential human exposure risks and the resultant implementation of this PIP Contingency Plan, public meetings and hearings will only be held when or through means by which the Department can ensure the public's health and safety and this PIP can be fully adhered to.

Attachments

- LEP Assessment
- A copy of the EJSCREEN ACS Summary Report, and a map showing the area evaluated

Table of Mandated Public Involvement Activities

| Activity | Dates |
|---|--|
| Application Notice (PN-1): The first notice of the Bureau's receipt of the permit application – applicant's obligations at 20.6.2.3108.B and C NMAC – Bureau's obligations at 20.6.2.3108.E NMAC | Within 30 days of the department deeming the application administratively complete |
| Newspaper display ads (PN-1 synopsis¹ in English and Spanish)- Applicant obligation NMED website https://www.env.nm.gov/public-notices/ Notice to government agencies Notice to interested parties | |
| Permit Notice (PN-2): Notice to the public of the availability of a draft permit for a 30-day review and comment period – the notice will outline the process for requesting a public hearing – obligation at 20.6.2.3108.H through J NMAC | Within 60 days of the department determining the application is technically complete and drafting a permit. |
| NMED website https://www.env.nm.qov/public-notices/ Newspaper legal ads Notification of interested parties Notice to government agencies Notice to Indian Tribes, Pueblos and Nations | |
| Response to Comments (if comments received): Upon the Secretary's decision regarding issuance of a discharge permit – obligation at 20.6.2.3109.B NMAC. The Response to Comments shall specify which provisions, if any, in the draft permit were changed and the reasons for the change, and shall briefly describe and respond to all significant comments on the draft permit raised during the public comment period or at any hearing. The Secretary shall notify persons who participated in the permitting action by mail or email of the action taken and the reasons for such action and shall include a copy of the Response to Comments. | Response is issued 30 days after the administrative record is complete and all required information is available |

¹ Suitable for display, the abbreviated format of the PN-1 synopsis does not contain all the information provided by a full public notice, e.g., language assistance or non-discrimination information.

ATTACHMENT

Limited English Proficiency (LEP) Assessment

Facility: Outlook Dairy, DP-1302

Factor 1: The Number and Proportion of LEP Individuals Eligible to be Served or Likely to be Encountered in Community of Concern

See Public Involvement Plan (PIP), Table of EJSCREEN Results for the Affected Community.

Conclusions:

- 1. The number of LEP individuals (persons over the age of 5 who speak English "less than very well" in the affected community) is 24.
- 2. The percentage of LEP individuals in the affected community is 18%.
- 3. The percentage of linguistically isolated households is 9%, which is somewhat greater than the statewide average.
- 4. Spanish is the predominant non-English language spoken by LEP persons.
- **5.** Historical participation: The Bureau maintains a facility-specific mailing list. No one has requested to be placed on a facility-specific mailing list. A review of the administrative record for this facility indicates limited public interest/participation overall during the past 10 years. The portion of that public interest attributable to the LEP community cannot be determined from the record.

Factor 2: Frequency with which LEP Individuals Might Come in Contact with the Program

Contact with the discharge permitting process primarily occurs when a permit application is under review. The GWQB provides notice to the public and encourages participation. Individuals may participate by requesting information, submitting comments on draft permits, requesting hearings, and taking part in hearings. Some permits generate considerable public interest, but participation is low for most permits. Historical participation in permitting activities for this facility is summarized under Factor 1.

Conclusion:

LEP participation and overall public interest in this facility have been limited historically. Based on this record, the Bureau considers the potential for LEP contact with the permitting process to be "infrequent."

Factor 3: Nature and Importance of the Activity or Service Provided by the Program

The permitting activity is deemed by the GWQB to be "important" to NMED, the impacted community, and the State of New Mexico. The permitting activity is important to NMED because the permit establishes site-specific requirements that must be met to ensure protection of public health and groundwater quality and provides a means to enforce those requirements. The

Page | 1 DP-1302 PIP-LEP

permitting activity is important to the impacted community because poorly operated waste treatment facilities have the potential to pose a public nuisance and adversely affect the quality of life of people living in the vicinity of the facility. The permitting activity is important to the State of New Mexico because establishment of effective permits ensures that discharges will not impact the State's limited groundwater resources and that waste disposal is conducted in a consistent manner throughout the State.

Conclusion:

The GWQB considers the permitting activity "important" to NMED, to the state as a whole, and to the impacted community.

Factor 4: Resources Available to NMED for LEP Services and Associated Costs

For outreach to LEP communities associated with this permit action, NMED employs an in-house Spanish translator/interpreter and utilizes a phone interpretation service to assist during direct communication between LEP individuals and NMED staff. The costs of newspaper publication of public notice in Spanish and of interpretive services for a public meeting or hearing are being incorporated into the Bureau's budget, to the extent possible. Fees collected from the permittee in accordance with the schedule at 20.6.2.3114 NMAC are not sufficient to cover these costs.

Conclusion:

The Bureau can accommodate the costs of the LEP services identified in this plan. If additional services are requested, the budgetary implications will be reviewed.

LEP Services Plan:

To accommodate the needs of the LEP individuals who may be interested in this permitting process, the Bureau plans to:

- 1. Translate the Public Notice Two (PN-2) and any subsequent public notices into Spanish and publish in paper serving the local community.
- 2. Provide interpretive services at any public meeting or public hearing, if requested.
- 3. Interact with members of the LEP community using certified interpreters, when needed and feasible.

The Bureau will consider requests from members of the affected community for additional LEP services.



EJSCREEN ACS Summary Report



Location: User-specified point center at 33.037178, -103.209799

Ring (buffer): 4-miles radius

Description: Outlook Dairy DP-1302

| Summary of ACS Estimates | 2015 - 2019 |
|--------------------------------------|-------------|
| Population | 142 |
| Population Density (per sq. mile) | 3 |
| People of Color Population | 71 |
| % People of Color Population | 50% |
| Households | 47 |
| Housing Units | 52 |
| Housing Units Built Before 1950 | 4 |
| Per Capita Income | 31,508 |
| Land Area (sq. miles) (Source: SF1) | 43.96 |
| % Land Area | 100% |
| Water Area (sq. miles) (Source: SF1) | 0.05 |
| % Water Area | 0% |

| 70 Water Area | | | 0,0 |
|--|-------------------------------------|---------|---------|
| | 2015 - 2019 ACS Estimates | Percent | MOE (±) |
| Population by Race | | | |
| Total | 142 | 100% | 429 |
| Population Reporting One Race | 138 | 97% | 523 |
| White | 135 | 95% | 437 |
| Black | 0 | 0% | 12 |
| American Indian | 0 | 0% | 12 |
| Asian | 0 | 0% | 12 |
| Pacific Islander | 0 | 0% | 12 |
| Some Other Race | 3 | 2% | 38 |
| Population Reporting Two or More Races | 4 | 3% | 57 |
| Total Hispanic Population | 71 | 50% | 351 |
| Fotal Non-Hispanic Population | 71 | | |
| White Alone | 71 | 50% | 290 |
| Black Alone | 0 | 0% | 12 |
| American Indian Alone | 0 | 0% | 12 |
| Non-Hispanic Asian Alone | 0 | 0% | 12 |
| Pacific Islander Alone | 0 | 0% | 12 |
| Other Race Alone | 0 | 0% | 12 |
| Two or More Races Alone | 0 | 0% | 12 |
| Population by Sex | | | |
| Male | 80 | 56% | 277 |
| Female | 62 | 44% | 183 |
| Population by Age | | | |
| Age 0-4 | 7 | 5% | 94 |
| Age 0-17 | 38 | 27% | 174 |
| Age 18+ | 104 | 73% | 237 |
| Age 65+ | 28 | 20% | 111 |
| | | | |

August 29, 2022 1/3



EJSCREEN ACS Summary Report



Location: User-specified point center at 33.037178, -103.209799

Ring (buffer): 4-miles radius

Description: Outlook Dairy DP-1302

| | 2015 - 2019 ACS Estimates | Percent | MOE (±) |
|--|-------------------------------------|---------|---------|
| Population 25+ by Educational Attainment | | | |
| Total | 88 | 100% | 241 |
| Less than 9th Grade | 17 | 20% | 101 |
| 9th - 12th Grade, No Diploma | 12 | 14% | 94 |
| High School Graduate | 22 | 25% | 80 |
| Some College, No Degree | 18 | 21% | 119 |
| Associate Degree | 4 | 4% | 37 |
| Bachelor's Degree or more | 15 | 17% | 81 |
| Population Age 5+ Years by Ability to Speak English | | | |
| Total | 135 | 100% | 391 |
| Speak only English | 78 | 58% | 260 |
| Non-English at Home ¹⁺²⁺³⁺⁴ | 57 | 42% | 257 |
| ¹ Speak English "very well" | 33 | 24% | 197 |
| ² Speak English "well" | 11 | 8% | 94 |
| ³ Speak English "not well" | 2 | 2% | 30 |
| ⁴Speak English "not at all" | 10 | 7% | 123 |
| 3+4Speak English "less than well" | 12 | 9% | 126 |
| ²⁺³⁺⁴ Speak English "less than very well" | 24 | 18% | 131 |
| Linguistically Isolated Households* | | | |
| Total | 4 | 100% | 59 |
| Speak Spanish | 4 | 100% | 58 |
| Speak Other Indo-European Languages | 0 | 0% | 12 |
| Speak Asian-Pacific Island Languages | 0 | 0% | 12 |
| Speak Other Languages | 0 | 0% | 12 |
| Households by Household Income | | | |
| Household Income Base | 47 | 100% | 108 |
| < \$15,000 | 5 | 10% | 55 |
| \$15,000 - \$25,000 | 7 | 15% | 73 |
| \$25,000 - \$50,000 | 5 | 10% | 59 |
| \$50,000 - \$75,000 | 9 | 20% | 72 |
| \$75,000 + | 21 | 45% | 86 |
| Occupied Housing Units by Tenure | 21 | 4070 | 00 |
| Total | 47 | 100% | 108 |
| Owner Occupied | 32 | 68% | 90 |
| Renter Occupied | 15 | 32% | 102 |
| Employed Population Age 16+ Years | 15 | 32% | 102 |
| Total | 109 | 100% | 318 |
| In Labor Force | 72 | 66% | 241 |
| Civilian Unemployed in Labor Force | 0 | 0% | 12 |
| Not In Labor Force | 37 | 34% | 166 |
| | 31 | 0-7/0 | 100 |

Data Note: Datail may not sum to totals due to rounding. Hispanic population can be of anyrace.

N/A means not available. **Source:** U.S. Census Bureau, American Community Survey (ACS)

*Households in which no one 14 and over speaks English "very well" or speaks English only.

August 29, 2022 2/3



EJSCREEN ACS Summary Report



Location: User-specified point center at 33.037178, -103.209799

Ring (buffer): 4-miles radius

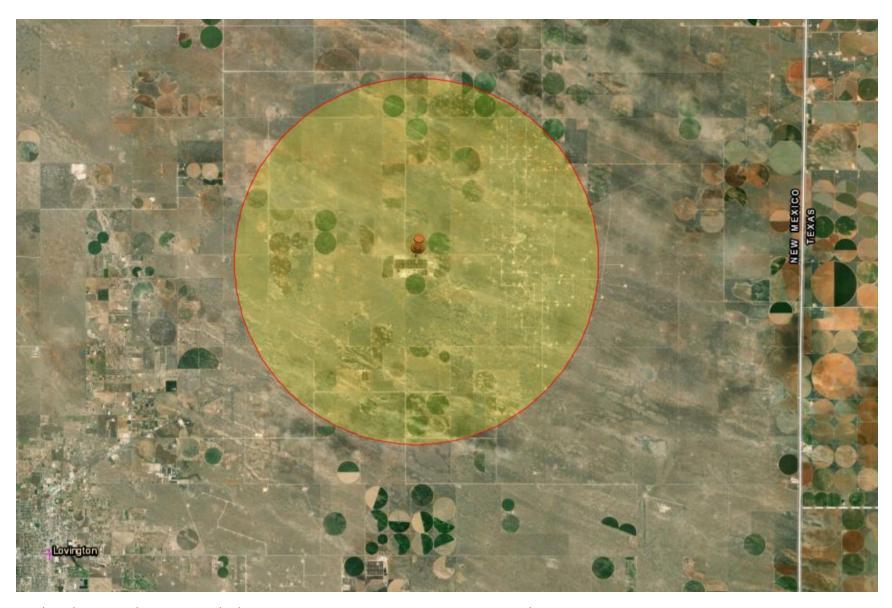
Description: Outlook Dairy DP-1302

| | 2015 - 2019 ACS Estimates | Percent | MOE |
|-------------------------------------|-------------------------------------|---------|-----|
| ulation by Language Spoken at Home* | | | |
| I (persons age 5 and above) | 989 | 100% | 4 |
| English | 584 | 59% | 3 |
| Spanish | 393 | 40% | 4 |
| French | 0 | 0% | |
| French Creole | N/A | N/A | 1 |
| Italian | N/A | N/A | 1 |
| Portuguese | N/A | N/A | 1 |
| German | 10 | 1% | |
| Yiddish | N/A | N/A | 1 |
| Other West Germanic | N/A | N/A | 1 |
| Scandinavian | N/A | N/A | 1 |
| Greek | N/A | N/A | 1 |
| Russian | N/A | N/A | 1 |
| Polish | N/A | N/A | 1 |
| Serbo-Croatian | N/A | N/A | 1 |
| Other Slavic | N/A | N/A | 1 |
| Armenian | N/A | N/A | 1 |
| Persian | N/A | N/A | 1 |
| Gujarathi | N/A | N/A | 1 |
| Hindi | N/A | N/A | 1 |
| Urdu | N/A | N/A | 1 |
| Other Indic | N/A | N/A | 1 |
| Other Indo-European | 2 | 0% | |
| Chinese | 0 | 0% | |
| Japanese | N/A | N/A | 1 |
| Korean | 0 | 0% | |
| Mon-Khmer, Cambodian | N/A | N/A | 1 |
| Hmong | N/A | N/A | 1 |
| Thai | N/A | N/A | 1 |
| Laotian | N/A | N/A | 1 |
| Vietnamese | 0 | 0% | |
| Other Asian | 0 | 0% | |
| Tagalog | 0 | 0% | |
| Other Pacific Island | N/A | N/A | 1 |
| Navajo | N/A | N/A | 1 |
| Other Native American | N/A | N/A | ١ |
| Hungarian | N/A | N/A | |
| Arabic | 0 | 0% | |
| Hebrew | N/A | N/A | 1 |
| African | N/A | N/A | 1 |
| Other and non-specified | 0 | 0% | • |
| Total Non-English | 405 | 41% | 5 |

Data Note: Detail may not sum to totals due to rounding. Hispanic popultion can be of any race. N/A means not available. **Source:** U.S. Census Bureau, American Community Survey (ACS) 2015 - 2019.

*Population by Language Spoken at Home is available at the census tract summary level and up.

August 29, 2022 3/3



4 mile radius around DP-1032 Outlook Dairy, EPA EJScreen 2.0 Enviromapper Accessed 08-29-22