By 1948 the number of Jews in Mercedes was shrinking as the town was being superseded commercially by McAllen and by Harlingen. McAllen and Harlingen members of Temple Beth El of the Lower Rio Grande Valley in Mercedes met separately in committee. The decision of both committees was to dissolve the Mercedes congregation. The Harlingen participants met 10/26/48 at the home of Mr. and Mrs. Charles Messner where Ned Sondock chaired the meeting. They received a report from Nate Koppel of the joint meeting held in Mercedes on 10/17/48. Both sides had agreed to sell the real estate comprised by the temple structure and its lot, and to divide the personal property and assets of the congregation. It was officially dissolved. The structure was later sold to a church.

Temple Emanuel in McAllen was already under construction, so it purchased the original pews, the Torah, prayer books, all the chairs, tables and kitchen items for $250.00. The Harlingen group retained those items marked "Temple Beth Israel.

Between late 1948 and June 24, 1951 (the Jewish calendar year 5711) when its newly constructed temple on E. Jackson Avenue at 17th Street was dedicated, the Harlingen congregation met in various places including Barracks #T50 at the former Harlingen Army Airfield. This building served as both sanctuary and Sunday school for the congregation.

1948 Temple Beth Israel site is selected at 1702 E. Jackson. The organizers are primarily the first generation of Jews to reside in the city. They include the Feldmans, Levines, Koppels, Sondocks, and others. Sam Feldman is its first president.

In December 1949 the architectural firm of Cocke, Bowman and York had been contracted for $25,500 for plans and specifications. E.J. Waitman was its general contractor.

By 9/20/50 the newly completed Temple Beth Israel would hold its first high holidays Yom Kippur service according to Larry Rosow, secretary-treasurer.

When the temple was dedicated it had 63 members in its congregation. On November 14, 1951 it was officially incorporated under Texas law.

From 1955 through 1966 the official paid membership ranged from 34 to 43 individuals. The number of attendees for services was significantly higher as Jewish military personnel at the reactivated and now renamed Harlingen Air Force Base were active participants. Their presence was considerable from April 1952 through June 1962 after which the base was permanently closed. This also meant the loss of Harlingen businesses including those of some Jewish merchants. This too diminished the numbers in the congregation.

The limited and fluctuating size of the congregation meant that there were few years when it could hire a fulltime rabbi. Often the services were conducted by student rabbis or visiting rabbis from McAllen and Brownsville.

A more complete history than the above was compiled by Lewis Levine for a presentation to the Texas Jewish Historical Society visiting Harlingen on February 11, 1995. It is part of the Harlingen Library Archive Room file.
Some time after mid-1961 a Sunday school addition with four classrooms and two restrooms were added as well as a recreation room attached to the temple. The kitchen was expanded and modernized. The total cost for these changes was $26,935. After more than 50 years the temple was showing normal wear, tear, and its middle age. After Hurricane Dolly damaged the building in July 2008, considerable repairs were necessary and their costs fortunately covered by insurance. In 2009 extensive renovations were made to its plumbing, electrical, and other areas requiring updating. The Koppel family donated two striking front doors fabricated from African wood and with unique metal door handles featuring Jewish stars. A new floor with 2' x 2' ceramic tile was laid. The kitchen saw completely new stone counters, stainless steel appliances, and a commercial size stove. Six narrow horizontal windows in one wall of the sanctuary were replaced by beautiful stain glass creations designed by the Hand of Man. The current sixty theater style seats will be replaced by newer models. The Temple was scheduled for its re-dedication on December 11, 2009. This would coincide with the happy celebration of the Jewish holiday Chanukah. The congregation has risen in number to around 100 members. Strangely enough some recently joined members are converts with an unusual background. They are Mexican ethnics who believe that their ancestors were Jews who fled to the border regions of Mexico when the Spanish Inquisition increased its examinations and punishments starting in Mexico City. They became in many instances "Crypto" Jews rather than abandoning their beliefs altogether. Over time however they were integrated into the Christian community though some families practiced some traditional Jewish practices without knowing their origin or why. With genealogy research on the increase, recent years have seen a resurgence in interest in verifying Jewish roots of some Mexican families. Fernando and Alma Russek, he being the temple's president, were to be honored with a testimonial dinner on October 22, 2009 in recognition of their tireless dedication to the Harlingen area Jewish community.