

- Mr. Martin commented that Sunoco Logistics is currently in the process of creating a cavern for 1 and that today's proposal is for the creation of 2 additional caverns that will be drilled. They will be drilling down to natural salt formations that exist today and are typically 1,500 to 1,700 feet below grade.
- Mr. Martin continued to explain that after they drill down to the appropriate depth they pump fresh water into the caverns to expand the space; they slurry the salt until it becomes a brine solution. Once the solution is liquefied they pump the cavern out to create the storage space, which is used to store the natural gas (butane).
- Mr. Martin commented that they start with the salt formation which are prevalent in southeast Michigan. They go in and wash out all the salt and again create the space to use for storage of the butane.

Chairman Chandler closed the public comments portion of the meeting and opened it up to comments from the Board members.

- Mr. Chandler asked Mr. Martin the depth of the caverns.
- Mr. Martin replied that the salt formations are approximately 1,500 to 1,700 feet below grade.
- Mr. Chandler questioned if they were salt formations.
- Mr. Martin replied that they are natural salt formations which exist prevalently in southeast Michigan and that they are fortunate enough to have them below their property.
- Mr. Martin commented that Marathon Petroleum also operate salt mines and caverns all over Michigan.
- Mr. Chandler asked Mr. Martin if the salt absorbs the liquid or if the caverns were open.
- Mr. Martin replied that once they create the caverns they become open caverns but, now they are just a layer or bed of salt. After drilling, fresh water is pumped in the cavern to dissolve the salt and create the space.
- Mr. Chandler asked Mr. Martin if they have existing wells.
- Mr. Martin replied that yes that was correct. They have 9 existing wells, 8 are operational, and all store butane.
- Mr. Chandler questioned Mr. Martin if the drilling was straight down.
- Mr. Martin replied that it was in fact straight drilling, not horizontal or directional drilling.
- Mr. Clark asked Mr. Martin if it was liquid that was being pumped into the caverns.
- Mr. Martin replied that yes, as a transportation company they operate under the Federal regulations of DOT-195 so, all that Sunoco Logistics does is transport and store liquids, they are never in the "gas state"; that would be part 192 of the Federal Code and Regulations. Sunoco Logistics only deals with liquids; liquid butane or liquid brine solutions.
- Mr. Clark asked Mr. Martin if any of the liquids can leak into the ground water.
- Mr. Martin replied no.
- Mr. Clark asked if that was all that Sunoco Logistics would be pumping into the ground.
- Mr. Martin replied that it will either be a brine solution or liquefied butane.
- Mr. Chandler stated to Mr. Martin that he noted that they have a disposal well and wondered what kinds of liquids they put into this well.
- Mr. Martin replied that the disposal well, which is deeper than the caverns, is used for excess brine solution that they have no use for.
- Mr. Chandler asked Mr. Martin if the brine being pumped out is put it into ponds located on the property.

- Mr. Martin explained that the ponds, which are a part of their operations are brine ponds. They use those ponds to ensure that the caverns are not over expanded, they don't want to change the volume of what is in the caverns over time. So, when the caverns are not filled with butane they are filled with the brine solution. The caverns are never empty. The brine solution pumped into the caverns has to be saturated brine, not fresh water; which creates more brine. Otherwise, they have problems.
- Mr. Zilka asked Mr. Martin to explain what happens to the brine.
- Mr. Martin replied that it is essentially a balancing act. The ponds serve as storage for the brine solutions. When operating during summer conditions, the refineries are not calling for butane so the brine is in the ponds. When reversed and into winter operations and the refineries want to put butane into the gasoline, the brine goes into the caverns and the butane comes out and is sent to the refineries. (Marathon or BP in Toledo, OH).
- Mr. Clark stated that it seems to be a cycle.
- Mr. Martin commented that is was an annual cycle for the past 40-50 years.
- Mr. Chandler asked Mr. Martin when the first well was drilled.
- Mr. Martin replied that the first well was drilled in the 1950's and the last of the existing wells was drilled in the 1970's.
- Mr. Chandler questioned Mr. Martin if there has been any changes in the EPA that require new or different permitting.
- Mr. Martin stated that even still today the EPA refers to the MDEQ in regards to obtaining permits to drill for, or create and operate storage caverns. He also stated that Sunoco Logistics has applied for and received permits through MDEQ for storage caverns 11 and 12 to proceed with drilling.
- Mr. Zilka asked Mr. Martin why these wells are numbered 11 and 12 when on the site plan he noticed numbers 13 and 14.
- Mr. Martin replied that they were looking to expand their total capacity by a million barrels. There is a limit to how big a cavern can get, they chose to break it up into 5 new caverns; 10-14, with each cavern being approximately 200,000 barrels in storage. Essentially, they picked a spot to number caverns arbitrarily. Then they determine which one is the easiest to permit through the MDEQ, in regards to obstructions, wetland delineations, and so forth. They are not necessarily drilling in sequence but, 10-14 are the ones they would like to drill and create caverns for.
- Mr. Chandler asked Mr. Martin how they determine the capacity of the well.
- Mr. Martin replied that it was done through geological studies. They look at the existing salt formation, how wide it is compared to the depth layer and that will tell how much room you can get it to grow.
- Mr. Martin stated that for existing caverns they have all been in the range of 150,000 to 160,000 barrels with older techniques. With today's technology they hope to get them larger.
- Mr. Clark jokingly commented that he hopes no one would strike a match on the grounds.
- Mr. Martin replied that they do not operate on an open flame policy.
- Mr. Mientkiewicz asked Mr. Martin to confirm that wells 10-14 are proposed wells for the future.
- Mr. Martin replied that well 10 is a proposed well for the future but well 14 was drilled last year. The plans show future wells of 10 and 13.
- Mr. Chandler asked Mr. Martin if he received a copy of the recommendations from the Planning Department.
- Mr. Martin replied that he did.
- Mr. Chandler asked Mr. Martin if there were any problems with the recommendations.
- Mr. Martin replied no but, he would like to provide comment on how they would address each of the recommendations. Number one; that's why he is here today.

- Ms. Maise commented that they initially had a date on the project but because of the conditions that are recommended, the Building Department will need to clear all of the additional items and that is when the date would start. The recommendation was worded that the temporary use permit will be issued upon city approval of the temporary use, once conditions are met. That will be the start date.
- Mr. Martin asked if the temporary use permit shall be valid until January 11, 2016. He hoped that the date would be flexible depending on the start date.
- Ms. Maise asked Mr. Martin if they want to put specific dates.
- Mr. Martin replied that he would like to not have a specific end date if possible. If it could be open for 2016, which is what they would like to do because they are not sure of a start date at this time and they would like to address any issues with the Building Department.
- Mr. Chandler asked Ms. Maise if they could approve a timeframe of 6 months.
- Ms. Maise replied to Mr. Chandler that actually the ordinance allows up to 12 months on any temporary use permit.
- Mr. Chandler asked Mr. Martin if 12 months would be enough.
- Mr. Martin replied that it would be and he would wish to have it open for all of 2016.
- Ms. Maise stated that the temporary use would be 12 months from date of approval.
- Mr. Martin continued with stipulation number 3 of the recommendations: A copy of the MDEQ Part 615 permit must be provided. Mr. Martin stated that they do have those and they can provide to both the Building and Planning Departments.
- Mr. Martin continued with stipulation number 4 of the recommendations: Due to the proximity of the Detroit Metropolitan Airport, all proposed development must be coordinated with the FAA. This is accomplished by submitting a Notice of Proposed Construction of Alteration, FAA Form 7460-1 to the FAA. Verification of submittal must be provided. Mr. Martin noted that based on the requirements, size of their project and rig, the FAA Form 7460-1 is not applicable to their project. However, a copy of the rig sizes can be supplied to the Building Department for backtracking purposes.
- Ms. Maise asked Mr. Martin if he has FAA approval.
- Mr. Martin explained to Ms. Maise that they do not need FAA approval based on the rig size and because they do not meet the criteria for the approval on height exceedance.
- Ms. Maise noted that the Building Department commented in their report that it may require FAA approval.
- Mr. Martin replied that they will supply documentation to show that FAA approval is not required.
- Mr. Martin explained that per Form 7460-1 anything over 200 feet above ground will need approval from FAA but, their rigs do not apply. So, they choose not to apply.
- Ms. Maise thought that they do need to apply and get notification for the record from the FAA that they do not meet the requirements.
- Mr. Martin continued with stipulation number 5: Any environmental assessment documentation as required by the Building Department must be provided. No notification has been received from the Building Department.
- Ms. Maise stated to Mr. Martin that notification will be provide once a building permit is applied for. The environmental assessment form is a check list of any hazardous materials.
- Mr. Martin continued with stipulation number 6 of the recommendations: Permits from the Building Department are required for any temporary construction/office trailers. Sunoco Logistics is aware and plan to apply for these permits.
- Mr. Martin continued with stipulation recommendation number 7: Greenbelt planting along Ecorse Road must be provided as required by PC-2015-001 and BZA-2015-001.

- Mr. Martin asked Ms. Maise if the plans were submitted to the Planning Department by Dave Bonami for the greenbelt planting.
- Ms. Maise replied that plans were submitted for the greenbelt planting but the plants weren't installed yet.
- Ms. Maise reminded the board that the greenbelt was part of the plans for the fence variance that they had seen at the beginning of the year. They are required to combine the properties and install the greenbelt. The plans have been approved and the Planning Department has those plans but, the installation still needs to occur, as well as the combination of the parcels through the Assessor's Office.
- Mr. Martin stated that he was informed by the facility supervisor that they intend to install the plants in 2016.
- Ms. Maise replied to Mr. Martin that they can put up a bond through the Building Department for installation of the greenbelt plantings until 2016.
- Mr. Martin then continued with recommendation number 8: Combination of all parcels as required by PC-2015-001 and BZA-2015-001. They are in the process of preparing the application for the combination of parcels. The legal assessment was just finished and DTE already recognizes some of the address on site and they do not want to change those because they have them addressed as utility drops.
- Mr. Martin went on to recommendation number 9: A business registration from the Clerk's Office is required.
- Mr. Martin was under the impression that Sunoco had already taken care of the business registration.
- Ms. Maise informed Mr. Martin that it was a yearly renewal and hadn't been renewed as of yet.
- Ms. Maise asked Mr. Martin to see the Clerk's office for verification on the business registration.

Motion by Zilka supported by Clark to approve BZA-2015-020; Sunoco Partners, Marketing and Terminals, LP; 7200 Inkster, in accordance with Section 22.03(e) a temporary use for cavern well drilling for 12 months, beginning October 15, 2015 through October 15, 2016. DP# 82-80-045-99-0001-703 subject to the following conditions:

1. The temporary use permit will be issued upon City approval of the temporary use.
2. The temporary use permit shall be valid for 12 months, beginning October 15, 2015 and ending October 2016.
3. A copy of the MDEQ Part 615 permit must be provided.
4. Due to the proximity to the Detroit Metropolitan International Airport, all proposed development must be coordinated with the FAA. This is accomplished by submitting a Notice of Proposed Construction or Alteration, FAA Form 7460-1 to the FAA. Verification of submittal must be provided.
5. Any environmental assessment documentation as required by the Building Department must be provided.
6. Permits from the Building Department are required for any temporary construction/office trailers.
7. Greenbelt plantings along Ecorse Road must be provided as required by PC-2015-001 and BZA-2015-001.
8. Combination of all parcels as required by PC-2015-001 and BZA-2015-001.
9. A business registration from the Clerk's Office is required.

Roll Call Vote: Ayes – Zilka, Clark, Mientkiewicz & Chandler. Nays – None. Motion Carried.

5. Discussion –None.

6. Adjournment

Motion by Mientkiewicz supported by Clark to adjourn at 3:25 p.m. Roll Call Vote: Ayes - Mientkiewicz, Clark, Zilka & Chandler. Nays – None. Motion Carried.



Donald Morris, Secretary
Zoning Board of Appeals