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The Board of Sanitary Commissioners of the Sanitary District of Hammond, Lake County, Indiana held a regular meeting at 3:53 p.m. in the Conference Room of the Administration Building located at 5143 Columbia Avenue, Hammond, Indiana.

President Dimopoulos called the meeting to order at 3:53 p.m. He stated that the Board held an Executive Session at 3:45 p.m. to discuss personnel and litigation matters in accordance with Indiana Codes.

Commissioners Present:

Button, Dimopoulos, Dye, Hawkins, Moore

Commissioners Absent:

N/A

District Personnel:

Marty Wielgos, District Manager

Matthew Muta, Deputy District Manager

Rachel Montes, Business Manager

Joe Allegretti, Attorney

Jeff Massey, HSD Rick Sutton, HSD Becky McKinley, GIS

Jack Smith, Sewer Department

Kaleigh Boyle, HSD

Others Present:

Mike Hickey, AB&H Donohue

The meeting started with the Pledge of Allegiance.

President Dimopoulos stated that the first order of business was the consideration of the May 15, 2018 Board Meeting Minutes.

Button moved and Dye seconded to approve the May 15, 2018 Board Meeting Minutes.

Ayes: Button, Dimopoulos, Dye, Hawkins, Moore

Nays: None

Motion carried 5-0. A copy of the May 15, 2018 Board Meeting Minutes are attached to

and made a part of these minutes.

District Manager's Report

District Manager, Marty Wielgos, stated that he would like to turn the floor over to Rick. He said that they discussed a few things at the management meeting this afternoon and he would like Rick to share that with the Board- specifically talking about where we are with Columbia Avenue and the replacement of that force main and also the two pumping stations that they talked about.

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Rick explained that we began the replacement of the force main that leads from Twin Creek down Columbia Avenue. We started just south of the hospital and are going south of 45th Streetthat is the stretch where these multiple breaks have been occurring. We have moved over to the other side of the road (north side of the road) and we have closed northbound traffic. He believes as of this Friday, they are really hoping to be within a block of 45th Street. At that point we are probably going to shut down the operation and get Columbia Avenue back to full traffic and full access for everybody and get traffic flowing normal and then they will probably divert the connection at 45th. BP is also working on a new pipeline right at 45th and Columbia Avenue so they are jacking and boring into the railroad tracks and putting in a new pipe, so they are going to have our pipe exposed. By Friday, like he said, he is hoping to be almost to 45th Street. The other thing that he wanted to make the Board aware of is the Dyer Road pumping station. The wet well where the wastewater comes in the pump station is not doing well- it is being chemically attacked- which is the easiest way that he can say it. Just so you guys know when you see these bills start coming in that you know what it is for. There is going to be a lot of money being spent for a repair that will not last long-term because we do not know what it is. It does not smell like sewage to him. He just wanted to Board to aware that Dyer Road pumping station is in need of major repair.

Marty added that everything in this station is disintegrating. All of the working components are just coming apart because of whatever this is that is coming into this station that we cannot identify. The question is if the District maintains and repairs pumping stations in Munster, it is looking more and more like this particular pumping station because of whatever is coming in (until we find out what it is and where it is coming from) that this has been going on for many years and now at this point — He asked Rick what the big expenditure is now at this station.

Rick answered that we have to replace the pumps. The pumps are 100 horsepower pumps. They are fairly big, submersible pumps and we pulled one up the other day and the housing is literally eaten away. They are more than likely beyond the point of rebuild. They are old, but it is very rarely that you see the housing of these pumps with big holes in them. Replacing some bearings is one thing, but this is chemically structural failure.

Marty commented that what he is saying Mr. Hawkins and the Town of Munster at this particular station we have something going on there that has not been identified, but it is causing the station to literally deteriorate. He thinks that it deserves further discussion with the representatives from the Town of Munster so that we can try to get some kind of understanding on the parties responsible for this station as far as what it is going to need. He asked to be corrected if he is wrong, but he believes this particular station like most in the Town was put up by the contractors doing whatever the development was. He asked if that is correct.

Rick replied that Dyer Road he is honestly not sure. He asked Jeff if he would be able to help him.

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Jeff commented that he also is not sure about that one. He said that is a pretty big station in Munster, so it might have been built by the District. He thinks it may have been built as one of the main stations in Munster.

Rick added that it is near the high school, hospital and the homes. He believes they all gravity to Dyer Road in that area.

Commissioner Button asked if it was constructed prior—

Commissioner Hawkins said that it was after. He has been looking at history and he thinks it was around 20 years ago the District was on hard times so Munster put some money into it.

Commissioner Button stated that station was there long before that.

Rick commented that it has been there at least 24 years, so he can say that because that is when he started.

Jeff agreed that it has been there a long time.

Rick said that he can get the date. He will be able to find the original structure date.

President Dimopoulos questioned if there is any way to trace back where these chemicals are coming from.

Marty responded that he asked Mr. Massey to take some samples and send them to whomever we need to send it to to get some kind of determination of what this substance is. He asked Jeff to explain to the Board that we can do that, but it may not give us the answers that we are looking for because why.

Jeff explained that one of the things that we know is going on there is that there is an unusually high production of hydrogen sulfide in that station. Hydrogen sulfide is pretty naturally occurring in wastewater. The problem is why it is occurring in such a high concentration at this particular service station and that is what is sending us off. Yes, there is high hydrogen sulfide, but that does not point to a specific user. We know of two specific industries in that area that are both permitted (Community Hospital and Pepsi) and we monitor them so we know it is not coming from either of those two. We monitor them for a myriad of parameters and he is certain it is not coming from there. He is looking at the new hospital that is coming up, but they are real new to the game and this situation was going on before then. He started looking at the landfill as a possibility of causing the issue, but there is not really anything other than the brewery and warehouses. Unless there is something going on that everybody is totally unaware of in one of these warehouses, it is kind of a mystery of where things are going on. He has been reading some literature that explains how waste from the brewery can have a reaction with wastewater and maybe some of the active yeast- if they are discharging active yeast- if that can react in the

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sewers and help speed up the production of hydrogen sulfide. The literature actually is saying that can happen and if a certain pH occurs in the sewer that the yeast instead of producing methane like normal, it will produce hydrogen sulfide. He is not 100% certain that Three Floyds actually discharges their yeast. A lot of them will package the yeast or take the waste yeast and ship it off as a byproduct because there is some reuse for it.

Commissioner Dye commented that it would have to be a pretty large concentrate.

Marty answered yes. It would have to be somebody pumping a lot of stuff into the sewer.

Commissioner Hawkins commented that as a metallurgist with some background in chemistry you would have to have such a large concentration of flow to cause this. He thinks it is going to be pretty interesting when test results come back. He told Jeff that he does have the manager of Three Floyd's cell number if he needs it.

Jeff replied that he is going to pay them a visit to walk through and have a chat with them again. We have to start looking at sources and checking boxes off what is not causing this to find out what actually is.

Marty stated that part of Jeff's theory and this is all theory while we are trying to find what the real answer is, but part of the theory is as you explained in the manager meeting today was that it is a combination of maybe Three Floyds and who else.

Jeff stated that he is reading a document that if the pH level is right in a sewer where a brewery is at or discharges at and it finds a large carbohydrate that you can speed up the production of hydrogen sulfide in a sewer by a great deal. When you get to Dyer Road pump station and you have Three Floyds waste coming in there which it could contain the yeast, but then you have Pepsi which does contain quite a bit of sugar and carbohydrates. The reason you do not see this in every area that has a brewery is because they do not have that added load from a big, sugary pop manufacturer like Pepsi. He thinks it may be a combination of the two is really driving a reaction to produce the hydrogen sulfide. There is no doubt, in his mind at least, the hydrogen sulfide produced in this station is outrageous. Anybody who has been by that area can smell it. The question is why it is so rancid in that station.

Commissioner Hawkins asked if they have checked the amounts yet at that station.

Jeff replied that they have had meters out there before, but he does not know the numbers off the top of his head. They have gone backwards walking the lines trying to find the source, but we could not find a source that somebody was dumping a sulfide per say to say that this is a hot spot.

Commissioner Hawkins asked if it is the same thing.

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Jeff replied certainly. He said that Rick was out there today with a respirator trying not to die while he was in there.

Commissioner Hawkins commented that again, as a metallurgist, if it is so close to the extent that it is effecting the pump structures that would really have to be a high concentration.

Rick added that the easiest way for him to describe it is it is dissolving the station.

Marty stated that all of the components in the station pumps and below the water level are dissolving.

Rick said that he should not say that. He does not know below the water line, he does not know what the floor of the pump station looks like.

Commissioner Button commented that the pump is naturally submerged—

Rick explained that it is a pipe so there is a dry well, wet well thing, so the outer case of the pump is not—

Commissioner Dye asked if it is dissolving from the inside out.

Rick answered that he cannot say this categorically because he has not inspected the pump that closely, but he can see that there is a big hole and that was surprising to him. The wet well where the influent into the station first comes out of the sewer and into the sump, that whole room is really in bad shape.

Marty asked if it is also fair to say even with the components within this structure that have not come in contact with any of the stuff that is in the well being pumped out are all corroded.

Rick responded anything in the wet well area is nonfunctional at this point (there was a lift at one point, an overhead crane, blowers, HVAC units) all of that is. You do not walk on the grading because you are afraid that it is going to fall in. We are building platforms right now so that we can do some work in there, but that one area because it is like a three-room with a pump room next to it and an electrical control room next to it. Those other two rooms are not as bad, but yes they are affected by it. That whole area over there is not good. He does not know how the doors are even hanging on so we even have to put new doors on the building.

Marty stated that this is his point at the meeting today. We are going to be spending—each of those pumps are about \$60,000 so times three and we have not addressed or found out what the problem is. That is his concern and is why he thinks we need to have a little more dialogue with the Town because he does not think that we see this anywhere else across Hammond or Munster at our pumping stations.

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Rick said we do not see this anywhere else. At least not that he knows of. He asked Jeff to help him if he knew of something.

Jeff stated that the only thing that would be close to this with hydrogen sulfide was at Cargill. There was a time at Cargill when they were having some difficulties and they were producing a high amount of hydrogen sulfide and they were having some difficulties within their sewer system so they did some process changes to adjust the pHs and take care of their hydrogen sulfide production and that went away.

Rick added that 45th and Calumet is pretty nasty too.

President Dimopoulos asked if we could change the pH levels to stop this there too or not.

Jeff replied that we tried when Dr. Unger was here, we tried some things to help with some issues and it did not work so well. There were some other issues going on. There was a broken sewer line at the time that was one of the problems in the area, but we didn't do so well taking care of it. It is not as easy as treating it. They treated the process before the hydrogen sulfide was ever formed because if you stop it from forming it is a lot easier than trying to treat it once it is already formed. The idea is if you can find what is causing it to form and fix it there. He does not want to keep saying Three Floyds, but if it is something that Three Floyds is doing and we can prevent them from discharging something that is causing it, that is a lot easier than trying to treat it once it is in the collection system and trying to do something once it is in the sewers. So if Three Floyds is discharging yeast and that is the issue we can do something to kill off the yeast before it is discharged that should take care of the problem. Or adjust the pH there so that it is a constant pH.

Commissioner Dye asked if we have a timeline when this issue really started effecting the station because you just said going back when Unger was around.

Marty asked how far back we can go when we think that this started.

Rick answered that he does not know. Those issues were the mid-90s when there were problems at that station, but it is nothing neat the scale that it is now and he cannot tell you personally, but maybe Jeff can help him, when it became so bad. He thinks within the last couple years he walked into Dyer Road and was horrified.

Jeff stated that it has been getting progressively worse.

Rick exclaimed that it is truly out of control at this point. You cannot open the doors and walk in the building. You can't. We have huge air movers, we leave the doors open for an hour or two, big box fans with 16-18 inch diameter air movers going for a couple hours, put on carbon filtration masks and you can stay in there for a little bit.

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Marty added that it is close to a lot of things that concern us all.

Rick agreed. He said the high school is right there, the football field, homes.

President Dimopoulos stated that we have to schedule something with the Town of Munster so we can start a process.

Marty agreed and said he wants to have a dialogue with them so we can tell them what we are seeing. I'm sure they would like to have their engineer go out to take a look at it, but he hates to see us spend the type of money they are talking about spending and that is just on the pumps-that is not talking about all the other mechanical components within the station that have been so radically effected by whatever this substance is that are also going to have to be addressed. According to Rick, we might as well clean out the building and start over. It is that bad.

Commissioner Button expressed that we need to find the root cause because if we do not find the root cause—

Marty agreed and said he just wanted to give an idea of the road we are heading down with costs.

Commissioner Dye asked about the tests.

Marty replied that Jeff is going to take some samples and we will send them out. As he has indicated before it is not going to tell us a real lot because of the fact—he asked Jeff to say it because he can explain it a lot better than he can.

Jeff explained that hydrogen sulfide is natural in sewers so to come up and try to find hydrogen sulfide is normal. We need to find what formed the hydrogen sulfide and what caused the hydrogen sulfide to form. Naturally degrading waste forms hydrogen sulfide.

Commissioner Dye said that it is a common element in sewage.

Jeff answered yes. So to come back and say you are going to find hydrogen sulfide is not going to help. It is not a telltale chemical as if you are looking for something from a specific industry.

Commissioner Button commented that you might look for concentration. You might look for increased levels of hydrogen sulfide.

Jeff answered that is true. You can go through and look at different areas and see where the concentrations are higher and we have done that, but the concentrations do not get high until they get to that station and it starts to mingle. You will see a little bit in the sewers somewhere, but you do not see the high numbers that are actually in that station. You see a little bit at the 45th station because you have a high concentration of sewage in the pump station and you will see it again at the other pump station, but not so much in any sewer.

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Commissioner Button commented that he thinks it needs to be looked at downstream because if this material is in Southside.

Jeff said oh you will see it downstream of the pump station after it goes out of the force main and goes by gravity. You will definitely see it there because it is not going away until it hits Southside.

Commissioner Button asked if it is in the liquid.

Jeff responded certainly. Whatever doesn't gas out in the sewer. Once it is in the pump station hydrogen sulfide will go to the air.

Commissioner Button stated that if it has gone through the pump and coming out on Columbia Avenue downstream from the force main it still contains—

Jeff replied that you still have some in there, but a lot of it goes out in the pump station. That is why the areas outside of the water is dissolving. The hydrogen sulfide is corrosive on itself. So if you go out there and anything that is metal and this stuff is going out to (the doors and all of this stuff) the hydrogen sulfide in the atmosphere it is off gassing from the water, but there is still some in the water as you move it down the line and then it will vent out of the sewers and then by the time you get to Southside and hit it with more water.

Commissioner Button asked about the effects on Southside.

Jeff answered that you really do not smell it at Southside. By that time it is pretty much diluted out, but you will get chances at Ridge Road and if you are there when the pumps kick on or off and you will smell it at Ridge Road and Columbia. You will still get a smell there every now and then.

Commissioner Hawkins asked if this has been a traditional problem.

Jeff responded that was a problem that Rick was eluding to earlier, but there was actually a break there and an issue that was fixed. It was a lot worse. Almost constant then, but that has been repaired. You will only smell it if you are by one of the manholes and they are open once you get down by the gravity lines where the force main is because there is nowhere for it to get out. Where the sewer goes gravity you have availability for it to vent and will smell it occasionally.

Commissioner Hawkins commented that we want to have a dialogue with Munster. He is wondering if he should make an arrangement.

Marty answered yes.

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Commissioner Hawkins commented and going from there, this seems like an odd occurrence. The gentlemen who have experience in this haven't experienced this. We know it is inbound flow related with the pump station. It is a problem with this pump station because if you do repairs it is going to be for nothing if we do not find root source with the rapid deterioration which seems to be more rapid than years past. Somebody has had this problem.

Mike Hickey added that he has taken notes and is going to talk with his team to see if they have heard of this before and what could it be. He will get back to Marty on that.

Commissioner Hawkins stated that it seems like an odd problem and it is rapidly deteriorating in that station and as a metallurgist to effect metals in such a high concentration that it is causing structural unsoundness that is very unusual.

Jeff said that hydrogen sulfide will do that. It is a pretty corrosive material. The other thing that Jack reminded me of was a situation in North Hammond and again we are spit balling to a certain extent here, but there was a situation in North Hammond where a new storm sewer was installed and the company that installed the new storm sewer did not route around the connections on the catch basin and every time it rained we would get H2S numbers that you could not even get a number on it and that was because the whole area was backed up with slag. Through the open crack in the lines it found its way into an open catch basin and would gas off. As soon as you had dry weather you would not smell it, but when there was wet weather it would come up and find its way out into open air. Jack's crew went out there and dug up the areas and grouted back all the lines and we have not had a problem since. He does not know maybe there is a broken line somewhere and there is a lot of slag in that area and that is what is causing the problem. It could be part of the issue what is going on at Twin Creek with the bottom of the line rotting out laying in groundwater that is filled with slag.

Commissioner Hawkins asked if he understood form the last meeting in memory if somebody took a soil sample along the force main on Columbia.

Mike Hickey stated that they did not take a sample, but did review soil reports. You can go online and find what the soil reports read, but 95% of the soil around Twin Creek was highly corrosive to steel, so just the soil that is there is corrosive to steel.

Jeff reiterated that this is just an idea.

Commissioner Hawkins commented that is very interesting right there.

Commissioner Button asked if that was at pumping station or along the force main.

Mike Hickey stated that there were four different soil types and three of the four were highly corrosive to steel and then 5% was not corrosive to steel. 95% of the soil was corrosive to steel. That is why Rick put PVC in which is a good idea.

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Marty added that what Rick is going to do at this particular pump station is replace the pumps because he feels that they are no longer trustable if we get heavy rains and then knowing that we have not identified or tackled the problem, but at this point we have no other course of action other than to change those pumps out.

President Dimopoulos stated that we are starting the process and will eventually figure out what is going on with the pumps because they will not be in there for years and years with the same problem.

PERSONNEL REPORT

There was no personnel report.

DEPARTMENT REPORTS

Safety Report

No highlights or questions on safety report.

GIS Report

No highlights or questions on GIS report.

Sewer Maintenance Report

No highlights or questions on Sewer report.

FINANCIAL REPORT

Business Manager, Rachel Montes, stated that she did not have anything to highlight.

RESOLUTIONS

The Board considered Resolution No. 20-2018: RE: A Resolution by the Board of Sanitary Commissioners of the Sanitary District of Hammond, Lake County, Indiana for Non SRF Eligible Engineering Assistance.

Button **moved** and Dye **seconded** to approve Resolution No. 20-2018.

Ayes: Button, Dimopoulos, Dye, Hawkins, Moore

Nays: None

Motion carried 5-0. Resolution No. 20-2018 is attached to and made a part of these

minutes.

The Board considered Resolution No. 21-2018: RE: A Resolution by the Board of Sanitary Commissioners of the Sanitary District of Hammond, Lake County, Indiana for Assistance in the Preparation of a CSO Public Notification Plan.

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Button moved and Dye seconded to approve Resolution No. 21-2018.

Mike Hickey explained that the State requires, IDEM requires HSD to prepare this CSO notification plan and the scope. They met with Hammond and have reviewed the federal regulations on this, but we have to put some signs up. So Hammond has some signs that are going to be put on the river and then they want you to identify and coordinate with a list of stakeholders. So we have a list of stakeholders, but we have to make sure that we are sending them electronic reports in a timely manner. He is going to meet with Don and Bob Szczudlo to make sure that is all going out. There are two reports required. There is a notification plan and he thinks the draft is due August 7th and the final on November 7th so that is one of the main things they will be preparing. Then, finally there is an annual report so there is two reports, there is some meeting with staff and making sure they are notifying appropriate people of what is going on.

Commissioner Button asked if this is some sort of electronic notification when a CSO is occurring.

Mike Hickey replied that HSD is already doing that, but just making sure that it is going to the right people. They want it within four hours of it happening. He used to get them (because he gets them also) in the middle of the night, but Bob has done something because he sees most of them come during the day so they are just making sure that we are doing what IDEM requires HSD to do.

Ayes: Button, Dimopoulos, Dye, Hawkins, Moore

Nays: None

Motion carried 5-0. Resolution No. 21-2018 is attached to and made a part of these

minutes.

The Board considered Resolution No. 22-2018: RE: A Resolution by the Board of Sanitary Commissioners of the Sanitary District of Hammond, Indiana Supplementing and Amending Board of Sanitary Commissioners Bond Resolution.

Button **moved** and Dye **seconded** to approve Resolution No. 22-2018.

Ayes: Button, Dimopoulos, Dye, Hawkins, Moore

Navs: None

Motion carried 5-0. Resolution No. 22-2018 is attached to and made a part of these

minutes.

The Board considered the Claims Approval Docket 05-29-18.

Button **moved** and Dye **seconded** for the approval of the Claims Approval Docket 05-29-18.

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Ayes: Button, Dimopoulos, Dye, Hawkins, Moore

Nays: None

Motion carried 5-0. A copy of the Claims Approval Docket 05-29-18 is attached to and

made a part of these minutes.

President Dimopoulos called for Old Business

Commissioner Button asked if there was any further action on the 45th Avenue pump station from Munster.

Commissioner Hawkins replied that Don Woodard sent information to Craig Hendricks.

Commissioner Button asked if there is any idea on when we will hear back from them.

Commissioner Hawkins said that he is not sure when, but he will check into it.

Marty wanted to add that we are having trouble with the railroads. He will let Joe speak on that.

Attorney Allegretti explained that as far as the acquisition of the railroads we submitted our good faith offer. It is just railroads acting like railroads. Lots of qualifications, lots of take it or leave it as for the quality of the deed and title being transferred, but we will get through it.

Marty said that the last thing he will add is that we have acquired the gas station at 175th and Linden. We submitted a check several weeks ago to the Court and the Court approved the appraisal of eight hundred and something odd thousand dollars, but he brought it up today that he drives past the gas station and they are still operating at full speed so he put a call into Mr. Westland today, but he was busy in meetings and has not gotten back to him yet, but he is a little confused. Joe cleared it up for him today that once the Court has had their appraisal and submitted to us and we pay that amount that that is immediate possession. It is not thirty days. It is immediate and that has not happened so he is hoping Mr. Westland will let him know tomorrow what is going on because it should be shut down.

Commissioner Button agreed. He said we were generous to the residents in the area on their departure. You're right that we own the property now. We just have to work with the current occupier to get them out.

Matt Muta stated that every property on the west side of Linden I snow owned by the Hammond Sanitary District. Four houses and two or three apartment complexes have been demolished in total. All but three of the residences on the west side of Linden have been boarded up. The only three that have people living in them have not paid rent and have all been giving eviction notices.

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Commissioner Button commented that he recommends that we move forward if we want Little Cal to reimburse us.

Marty replied that we are aware. We have not forgotten about it.

Commissioner Button responded that they are wondering, their people from other municipalities who sit on that board are wondering why the Little Cal has not made any payments for that work.

Marty responded again that we are aware.

President Dimopoulos commented that we received a letter from a Munster resident about our new rate structure and we have responded to him.

President Dimopoulos called for New Business

There was no new business.

President Dimopoulos called for Reports from Commissioners

There were no reports from commissioners.

President Dimopoulos called for Public Expression

There was no public expression.

President Dimopoulos called for a motion to adjourn the meeting

Dye moved and Moore seconded for adjournment.

Ayes: Button, Dimopoulos, Dye, Hawkins, Moore

Nays: None

Motion carried 5-0. The meeting was adjourned at 4:31 p.m.

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Sam Dimopoulos, President

Michael Dye, Viec-President

Dean Button, PE, Member

Michael Hawkins, Sr., Member

Patrick D. Moore, Member

ATTEST:

Rachel Montes, Secretary

Kaleigh Boyle, Assistant Secretary

Board Minutes Prepared By: Kaleigh Boyle