



**Multnomah Rural
Fire Protection
District No. 10**

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To: Alan Rappleyea, Hearing Officer
Lisa Estrin, Senior Planner
Multnomah County Land Use and Planning Division
From: Rural Fire Protection District 10, Board of Directors

Date: August 31, 2023

Subject: T-3-2022-16220- Rebuttal Testimony In Opposition

Multnomah Rural Fire Protection District 10 (RFPD10/the District) is submitting this testimony in opposition to the Portland Water Bureau's (PWB) proposed construction and operation of a water treatment and filtration plant, raw and finished water pipelines.

Specifically, this testimony responds or refers to following Exhibits submitted by the Applicant during the "open record" period that ended on August 7, 2023:

- Ex. I.59, Revised Hazardous Materials Management Plan, 8/4/23
- Ex. I.58, Supplemental Information for the Hazardous Materials Management Plan, 8/4/23
- Ex. I.74, Filtration Facility Operations Supplemental Info, 8/4/23
- Ex. I.75, Construction Supplemental Information
- Ex. I.87, Supplemental Information about Chemical Safety, (undated)
- Ex. I.84, Response to Select Testimony from Dana Beckwith, Global Transportation and Engineering on Transportation Impacts, 8/4/2023
- Ex. I.91, Fire Protection and Life Safety 3rd Party Consulting Review (undated)
- Ex. I.104, Consultant Report 2022 Community Risk Assessment & Standards of Cover for Gresham Fire. 2022.

Applicant:

A.) Ex. I. 59, Revised Hazardous Materials Management Plan, pg. 1 states: "This hazardous materials management plan (HMMP) details the proper storage, handling, and management of chemicals used at the City of Portland Water Bureau's (PWB) Bull Run Filtration Facility (Facility) and the emergency response procedures that must be followed in the rare **event of hazardous materials spills, fires, explosions, and other incidents.**"

pg. 3 states: "Hazardous materials used on-site generally consists of above ground liquid oxygen (LOX), ozone, carbon dioxide, sodium bisulfite, liquid ammonium sulfate, polymer, aluminum sulfate, polyaluminum chloride, soda ash, sodium hypochlorite, and diesel fuel. Hazardous wastes that will likely be generated at the Facility are waste solvent, mixed waste oil, and waste paint thinner."

pg. 11 states: "The Facility will be operated and maintained to **minimize the risk of hazardous materials spills, fires and explosions, and other emergencies**. Still, this HMMP includes a hazardous materials emergency response plan (HMERP) that establishes best practices and reporting protocols in the event of a hazardous materials spill or emergency. While PWB has a stand-alone emergency response plan (ERP) for the entire water system, this HMERP provides the procedures specific to the Facility and its hazardous materials."

RFPD10 Response:

RFPD10 cites these excerpts to document the fact that the applicant acknowledges operation of the proposed Filtration Facility **will create hazardous conditions**. The need for a Hazardous Materials Management Plan undeniably supports this conclusion.

Previous RFPD10 testimony (December, 2022 pg. 19) cites the Applicant's own words in listing hazards the proposed plant will create:

"health and safety hazards including but not limited to the following: - working at height - respiratory protection needs - emergency egress - chemical storage and feed - dangerous and hazardous materials - moving equipment - environmental conditions (such as heat, cold, sun exposure) - pits and underground vaults" *Source: PWB Basis of Design pg. 7-42

Applicant asserts that all of the proposed engineering, best management practices, staff training, adherence to applicable state and federal codes will reduce or minimize the risk for an accident (i.e. involving the many hazardous materials that will be utilized and stored in large quantities on site or accidents related to the other identified hazards) satisfies MCC 39. 7515 Approval Criterion "(F) Will Not Create Hazardous Conditions". This criterion is clearly stated and unequivocal. No exceptions are provided in the Code.

The hazardous conditions that will be created by operation of the proposed plant are acknowledged by the applicant, significant, un-refuted and cannot be remediated through any design feature, training, HMMP or condition of approval. The Applicant has failed to meet its burden.

Applicant:

B.) Ex. I. 58 pg. 1 states: “.....carbon dioxide is a cryogenic inert fluid and therefore not considered hazardous per IFC code.”

RFPD10 Response:

As noted in previous testimony from RFPD10, OHSA classifies compressed CO2 gas as hazardous. See attached Exhibit 1 for relevant excerpt from Safety Data Sheet.

Applicant:

C.) Ex. I. 58 pg. 1 states: “..... chemical suppliers in Oregon list ammonia sulfate as an irritant, it is not corrosive and not classified as hazardous per IFC code.”

RFPD10Response:

Although ammonia sulfate is not classified as hazardous per IFC code, it should not be concluded that it is without hazards. See Exhibit 2 for relevant excerpt from Safety Data Sheet.

Regardless, Applicant’s own Hazardous Materials Management Plan documents 9 Hazardous materials (see Table 5, HMMP) and an additional 9 “Potential Hazardous Chemicals to be determined following construction” (see Table 6, HMMP) that will be utilized for filtration plant operation. **A complete list of hazardous materials and the associated volumes to be used during the lengthy construction is not addressed.**

Applicant:

D.) Ex. I.74, pg. 1, “Operations History”: This section summarizes Applicant’s history with water treatment at the headworks dam in the Bull Run Watershed and more recently at their Lusted Hill Facility. Applicant concludes this section by stating: “.....operating the Lusted Hill Treatment Facility in RFPD10 boundaries since 1992 and according to Water Bureau records, has not required an emergency response from a fire department as a result of facility operation during that time.”

RFPD10 Response:

Applicant’s proposed projects are not comparable in size, scope or treatment processes. While Applicant can be proud of their operations history at their Lusted Hill Facility, that history cannot be relied upon to predict the future. Applicant has no experience operating a facility comparable to what is proposed in this land use application so past experience has no relevancy.

Applicant:

E.) Ex. I.74, pg. 2 states: "The Water Bureau has made decisions to use inherently safer technologies for drinking water treatment." Pg 3 states:.... "no chemicals are considered "highly hazardous chemicals" according to OHSA's Standard 1910.119 Appendix A...."

RFPD10 Response:

Regardless of whether or not "inherently safer" technologies will be utilized, materials submitted by the Applicant document 9 hazardous materials (8 that will be used in the water treatment process. RFPD10 maintains CO2 is hazardous). Applicant lists an additional 9 "Potential Hazardous Chemicals to be determined following construction" (see Tables 5 and 6, HMMP noted above). Included on Applicant's list is "ozone". **Ozone is included on OSHA's "List of Highly Hazardous Chemicals, Toxics and Reactives", (Appendix A to 1910.119).** Ex I.59, Hazardous Materials Management Plan, pg. 5 shows 900 lbs./day of Ozone will be used at the filtration plant. The TQ (threshold quantity) listed in the OSHA list of Highly Hazardous Chemicals is 100 lbs.

Although not addressed by Applicant, the same OSHA list includes Nitrogen Oxides. NOx is just one of the known hazardous components of diesel emissions. Significant diesel emissions will occur during the lengthy construction period and then continue during operation of the proposed plant (i.e. facility will store approximately 50,000 gallons of diesel fuel for generators. Diesel has a storage life of 6-12 months see Ex E.9 pg. 7).

Applicant:

F.) Ex I.74, pg. 2 "Treatment Deliveries": Applicant acknowledges regular deliveries of hazardous chemicals for the ongoing operation of the filtration plant. Applicant accurately notes the transport of hazardous materials is regulated by a variety of federal and state regulations over which the applicant has no control. Applicant states chemical delivery truck drivers are highly trained. Applicant also notes that PWB's "typical contracts with chemical vendors include provisions for the vendor to be accountable for appropriate cleanup in the event of a spill during transport."

RFPD10 Response:

In previous testimony, RFPD10 has noted that despite the many regulations, best management practices, thorough training, technological and engineering safeguards, accidents involving the transport and release of hazardous materials occur all too frequently resulting from equipment failure and/or human error. Ex. E.9, 6/28/23, Exhibit 3 (Multco document library), provides several examples.

Rather than provide assurance that the transport of large volumes of chemicals “will not create hazardous conditions” on rural roads or through daily use at the proposed facility, applicant testimony documents and underscores the opposite. The proposed project will create hazardous conditions related to the ongoing transport of hazardous materials on rural roads that cannot be eliminated by any best management practice, regulation, training, engineering safeguard or condition of approval.

Applicant:

G.) Ex I.74, pg. 4, “Training and Emergency Response”: Applicant states: “....operators are trained to use safety procedures, engineering controls, and personal protective measures to **minimize risk of any incident requiring emergency response.**”

Training includes “....**first aid, Incident Command System, confined space entry, and Hazardous Wastes Operations and Emergency Response (HAZWOPER)**. Operators use appropriate personal protective equipment (gloves, eye protection etc.) and the facility is designed with eye washes, safety showers, and other features for worker safety.”

“....operators take a 24-hour OSHA HAZWOPER training when hired and then 8-hour refresher course annually.” “The **courses include exercises based on potential realistic scenarios that could be encountered at the facility.**

RFPD10 Response:

Applicant documents best management practices and items required by Oregon OSHA. For example, “HAZWOPER training meets the requirements of OSHA standard 29 CFR 1910.120 for workers, managers, and supervisors working in hazardous waste operations and emergency response sites in Oregon” (source: Oregon OSHA website). Similarly, personal protective equipment, eye wash stations and safety showers are required in areas where worker’s jobs put them at risk of exposure to hazardous materials.

Applicant’s statements document the fact that the proposed filtration plant will create hazardous conditions. Applicant’s compliance with OSHA requirements may reduce or mitigate the hazards associated with the operation of the filtration plant, but these measures **do not eliminate hazardous conditions.**

Applicant:

H.) Ex. I.75, “Construction Supplemental Information”(no date), pg. 4
“Hazardous Material Management” lists a variety of hazardous materials related to construction activities that will be stored on site. Examples listed “include but are not limited to diesel fuel, equipment lubricants, hydraulic fluids, paint and other materials.....”

RFPD10 Response:

Applicant acknowledges the list is incomplete. Applicant submittal lacks any specificity regarding quantities; provides no information regarding storage locations; lacks a Hazardous Materials Management Plan. Additionally, applicant fails to provide any information regarding similar hazardous materials that will be utilized at the numerous raw and finished water pipeline project sites. Transport of these hazardous materials from the filtration plant site to the various pipeline construction sites creates additional truck traffic and opportunity for accidental release of hazardous materials in areas lacking appropriate safeguards.

Applicant:

I.) Ex. I.75, pg. 4 & 5, "Emergency Vehicle Access" Applicant states: "The **contractor will develop** a Traffic Control Plan (TCP) prior to performing work within the public roads. The TCP is developed in accordance with the Manual on Uniform Traffic Control Devices for Streets and Highways (the MUTCD)....." "MUTCD Part 6 on Temporary Traffic Control provides 184 pages of specific standards for the needs and control of all road users (motorists, bicyclists, and pedestrians) through a temporary zone where normal function of the roadway is suspended."

This section goes on to describe in some detail all the requirements that applicant has included in contract specifications and concludes with the following: "Emergency responders will also be provided with the contact information for the site foreman to allow direct communication between the parties. For example, emergency responders call ahead to a construction temporary road closure to ensure that emergency vehicles can proceed efficiently through the work zone. This coordination allows construction workers to adjust their work accordingly, such as by placing steel plates in order to allow the emergency vehicles to pass immediately upon arrival. Adjustments to TCPs will be made throughout construction as needed to improve response time if the construction team receives comments from emergency responders."

RFPD10 Response:

Applicant's commitment that "The contractor **will develop** a Traffic Control Plan (TCP) prior to performing work within the public roads" is unacceptable. RFPD10 has previously addressed this issue in its August 3, 2023 testimony:

“RFPD10 would like to point out that, to date, there has been no specific plan presented by the Applicant that provides any assurance that Emergency Response apparatus/staff will have un-delayed passage through the many construction zones their proposed project will create. We cannot over-emphasize the importance of every second and minute where someone’s life or loss of one’s home hangs in the balance.”

Despite the fact that the applicant selected General Contractor/Construction Manager firms many months ago and has had ample opportunity to develop and present a TCP, there has been no plan submitted. Instead, applicant continues to rely on vague references to an undisclosed future time that promises emergency responders will be able to pass construction areas “immediately upon arrival.” However, this immediate passage is contingent on emergency responders having “called ahead” to the site foreman first and then having construction workers “adjust their work accordingly” to move obstructing heavy equipment and “place steel plates” over large open trenches. All of this is to occur in a matter of minutes at proposed construction sites. Applicant further promises: “Adjustments to TCPs will be made throughout construction as needed to **improve response time if the construction team receives comments from emergency responders.**” This comment acknowledges delays will occur but if emergency responders provide comments to the construction team then an effort will be made to “improve response time.”

Scott Lewis, Chief GFES was asked if “emergency responders calling ahead” is a normal practice when construction causes significant impacts to the flow of traffic or emergency response. Chief Lewis response: “I have never encountered this before and I’ve been doing this a long time.” (40 years)

The two retired fire fighters that serve on this RFPD10 Board of Directors (combined 71 years experience) also stated that they had never heard of any situation that required emergency responders to call ahead to a construction site to arrange passage. Both of these Board members emphatically stated this proposed strategy is “unfeasible, unrealistic and will not work.”

RFPD10 does not believe the applicant “promises” are credible and certainly not supported by evidence. The reference to 184 pages in “MUTCD Part 6 on Temporary Traffic Control” offers no assurance that the concerns expressed in our previous testimony are or could be addressed. The delay of emergency responders created by construction crews “adjusting their work accordingly” or having to use more lengthy alternative routes represents an unavoidable hazardous condition for anyone depending on a timely response to their emergency.

Applicant:

J.) Ex. I.87, "Supplemental Information About Chemical Safety" Applicant responds to examples of hazardous materials releases at a variety of facilities and "provides high-level information about engineered and operational standards to safely store, handle and manage use of the chemicals at the filtration facility and prevent the types of referenced accidents."

RFPD10 Response:

RFPD 10 has previously noted that despite best management practices, staff training, various regulations and engineering safeguards, accidental release of hazardous materials can and do result from equipment failure and/or human error that result in injuries and environmental damage. The suggestion that "other facilities" lack measures comparable to applicant's proposed facility is not supported by any evidence.

RFPD10 maintains that hazardous conditions will be created by this proposed project and they cannot be eliminated. We are not staffed, or equipped to deal with the many hazards created by the proposed project and have concluded that this proposed project should be located in the Urban Growth Boundary where it is proximate to a fully equipped, trained emergency response agency with appropriate back up resources(i.e. City of Portland).

Applicant:

Ex. I.84, "Response to Select Testimony from Dana Beckwith, Global Transportation and Engineering on Transportation Impacts", 8/4/2023

K.) Ex I.84 pg. 23; Consultant states: "An increase in construction vehicles does not mean there will be an increase in construction vehicles causing accidents nor an increase in crash severity"

RFPD10 Response:

RFPD10 testimony dated 12/22/22 graphically demonstrates the impact of increased traffic on both vehicle crashes and pedestrian/bicycle crashes. See pg. 12 and 13 (source Multco Roads Atlas C, CIP 2020-24). Page 14 of this testimony also documents that crash severity in rural areas does increase: "In 2015, Oregon experienced 44,523 total crashes in urban areas, leading to 156 fatalities. In contrast, in the same year, the total crashes in rural areas were roughly one-fourth (10,633) of those reported in urban areas. However, the number of fatalities were about two times (254) more than those experienced on urban roads." (source ODOT)

Consultant provides no evidence to support its assertion that adding a significant number of heavy trucks and employee vehicles will not create hazards. A reasonable person looking at this evidence would conclude that the addition of hundreds of thousands of heavy trucks and work force trips to existing large, slow moving farm implements, local resident, pedestrian, bicyclist and farm worker traffic to sub-standard, deteriorated rural roads would represent a clear and un-deniable hazardous condition. Applicant then proposes to exacerbate the obvious hazards by closing some rural roads, requiring detours or lengthy delays thereby concentrating all of this traffic on a small number of the remaining sub-standard, deteriorated rural roads. This aspect of applicant's proposed projects creates hazardous conditions that simply cannot be eliminated, or even mitigated, through any traffic control plan.

Applicant:

L.) Ex. I.84 pg.29: Consultant questions validity of historic weather conditions on February 23, 2022 and cites data from "Detailed Weather Forecast for February 24, 2022 in Portland, Oregon, United States (world-weather.info)"

RFPD10 Response:

RFPD10 stands by its previous testimony which was obtained from Weather Underground Troutdale, Or. Weather History. Weather conditions in east Multnomah County frequently vary significantly from those in the City of Portland because of its proximity to the west end of the Columbia Gorge.

Applicant:

M.) Ex. I.84 pg.30: Consultant states: "YMCA Camp Collins is located at Oxbow Regional Park along the Sandy River off of SE Oxbow Park Road, approximately 3 roadway miles northeast of the filtration facility site and outside the project study area." And, "A seasonal adjustment of traffic volumes is not required by Multnomah County."

RFPD10 Response:

Although our comment regarding the shortcomings of applicant's Traffic Impact Analysis is relevant to post-construction traffic, **it was directed specifically at the lengthy construction period of both the filtration facility and the proposed raw and finished water pipeline projects.** SE Division, Oxbow Drive and Hosner Rd. have been identified by the applicant as major haul routes meaning they will experience high volumes of heavy truck trips for years. The intersection of Altman Rd. and Oxbow Drive will be heavily impacted (if not

closed) for an extended for pipeline construction, Hosner Rd. is also proposed as a “fix it first” project.

These same roads provide the primary access routes to Oxbow Regional Park and YMCA Camp Collins. Both facilities generate significant traffic volumes (and in the case of Oxbow bicycle traffic) especially during the warmer months of May-October. Failing to consider this traffic represents a significant flaw in applicant’s Construction Traffic Impact Analysis regardless of whether or not it was required by Multnomah County.

Applicant:

Ex. I.91, “Fire protection & Life Safety 3rd Party Consulting Review”, Performance Based Fire Protection Engineering, of Pittsboro, North Carolina August 7, 2023 .

RFPD10 Response:

Note: RFPD10 has been notified that the author of Performance Based Fire Protection Engineering review conducted his work for the applicant without a license or temporary permit from the Oregon State Board of Examiners for Engineering and Land Survey (OSBEELS). Fire Protection Engineering is included on the list of disciplines regulated by OSBEELS. The information provided documents that the author of Ex. I.91 was granted a temporary permit by OSBEELS on August 15, 2023 valid until September 12, 2023. Consultant’s completed work product is dated August 7, 2023. RFPD10 has also been notified that a formal complaint has been filed with OSBEELS regarding this matter.

Notwithstanding consultant’s lack of required license or temporary permit at the time consultant’s review was performed, RFPD10 has reviewed and responds to consultant’s report below.

Applicant:

N.) Ex.I.91 pg. 4 & 5 address consultant’s review of various bid documents related Architectural Code Analysis, Fire Protection Drawings, and Fire Alarm Drawings.

RFPD10 Response:

RFPD10 has not raised any issues related to these issues. They are appropriately addressed by others in the event that building permits are to be issued. Consultant acknowledges building plans have already been submitted

to the City of Gresham for review so the value of the consultant review is questionable.

Applicant:

O.) Ex. I.91, pg. 6 states: "Throughout the HMMP report dated September, 2022, there were several materials which, per the definitions of the code, were classified conservatively,"

RFPD10 Response:

RFPD10 comments presented in this document are based on applicant's revised HHMP contained in Ex. I.59 as well as the most recent information provided by applicant in Ex. I.58; Ex.I.74; Ex.I.75; and Ex.I.87. Consultant presents no evidence to suggest our prior or new testimony misrepresents applicants information or our conclusions.

Applicant

P.) Ex. I.91 pg. 7, Consultant response to Finding #3 in RFPD10's December, 22, 2022 testimony.

RFPD10 Response:

Consultant generally repeats information contained in RFPD10's report that supported Finding #3. Consultant concurs with the Finding #3 by stating: "For standard response types, such as fire alarms, medical calls, outside fires and citizen assist calls, unfortunately overlap incidents occur and yes, can lead to delayed responses." Omitted from consultant's report is the fact that Station 72 (highest percentage of overlapped calls at 46.2%) is the closest station to our service area and therefore most likely relied upon for additional resources. Also omitted by consultant is the fact that Station 72 is the location of the Hazmat response team.

Consultant comments about call volume are also contained in our 12/22/22 report as is the statement regarding "Demand Zone Reliability" (first unit availability). Consultant acknowledges ".....the 90th percentile is considered best practice and the most reliable measure to perform." and suggests that RFPD10's Station 76 is able accomodate additional call load. We concur and addressed this issue in Finding #10 which consultant chose to overlook. Finding #10 states: "Population and employment in the rural areas is expected to grow at approximately 3 – 3.5 percent per year. This growth will continue to have impacts on safety and conflicts between different modes. Road capacities and emergency response capabilities should be reserved for this expected growth."

Applicant:

Q.) Ex. I.91 pg. 8 & 9 Consultant response to Finding #4 (RFPD10 12/22/22 report) regarding specialty rescue and response services.

RFPD10 RESPONSE:

Consultant confirms lack of speciality response services at Station 76. These services constitute “public services other than those existing or programmed for the area”. Consultant does not dispute statement in Finding #4 regarding increased response time. Rather, consultant dismisses it by stating there is no NFPA standard for responding to hazardous materials or technical rescue incidents. Our finding was a statement of fact.....specialty response calls are not available at RFPD10’s Station 76 and consequently require more time for response. We stand by our finding.

Consultant correctly identifies Station 72 (Gresham Fire, GFES) as the location of Hazmat Team 3 but fails to recall that Station 72 has the highest level of overlapping calls (46.2% with a duration of 53 minutes, see Ex. I.103) which is a factor that contributes to delayed response time. Consultant also fails to note that Technical Rescue Team operates out of Station 71 which is located even further away from RFPD10 service area adjacent to Gresham City Hall. Although not mentioned by the consultant, Station 71 has the second highest probability of overlapping calls at 42.2% with a duration of 50 minutes (see Ex.I.103). In the event of an incident requiring specialty services, the lack of a NFPA standard for response time has no relevance to the victim(s) whose lives may rely on a timely response.

RFPD10 wishes to note that at the time of our 12/22/22 report, our statement regarding the uncertainty of continued funding for Hazmat response was accurate and provided by GFES. To the extent that this funding issue has been resolved, we are thankful.

Consultant fails to note that a safety levy on the ballot in the City of Gresham was defeated in the May, 2023 election. Had it been approved, Station 72 (highest level of overlapping calls and closest to our service area) would have received an additional response unit. As noted in our previous testimony regarding GFES “current operational service levels are not sustainable with existing funding gap.” Ex. I.103, pg. 96 documents significant increase in the year over year number of calls responded to by GFES. For example, between 2020 and 2021 calls increased by 10%. At the same time, daily minimum staffing has not increased in the last 20 years.

Applicant:

R.) Ex.I.91, pg.9, Consultant responds to Finding #5 regarding financial shortfalls, escalating number of calls within the City of Gresham as a contributing factor to response time delays.

RFPD10 RESPONSE:

Consultant confirms reduced reliability of Gresham Stations for back up and reiterates response reliability at RFPD10 Station 76. Consultant then speculates that based on review of “*similar facilities*” the proposed facility “....(*once constructed*) *is not expected to cause a significant demand on this station or mutual/auto aid partners.*” However, consultant (pg. 11) acknowledges “.....although historical data cannot be utilized to rule out any possibility of a future hazardous materials incident....” thereby confirming our previous comment. See section “C” on pg.3 above.

Applicant:

S.) Ex. I.91 pg. 9, Consultant responds to Finding #6 and confirms response time deficiencies within RFPD10’s service area and asserts the proposed facility sits “at the threshold of the 8 minute response.....”

RFPD10 RESPONSE:

RFPD10 does not dispute consultant’s assertion and has never raised the issue specific to the proposed filtration plant. However, we have consistently raised the response time issue with regard to the impact of the lengthy construction period especially as it relates to raw and finished water pipeline construction within rural road ROWs that will result in road closures, detours, delays etc.. The construction of these projects will exacerbate the documented response time issues that consultant seeks to refute.

Applicant:

T.) Ex. I.91, pg.10, Consultant responds to Finding #7 relating to the impact of road and traffic conditions impacting response times and contributing to the number of emergency calls.

RFPD10 RESPONSE:

Consultant does not dispute the Finding and agrees “.....that traffic conditions, specifically linked to construction, can increase response times.” Consultant notes “road shut downs are a common occurrence in all jurisdictions” and then states: “In the event that a prolonged lane closure occurs, alternative routes and/or availability for emergency response through the closure are established.”

Consultant does not indicate this rural area was ever visited during the development of his product and is clearly unfamiliar with the rural roads in RFPD10 service area. If the area roads had been evaluated, consultant would understand that “alternate routes” may add miles to a response. If consultant were apprised of the full extent of the impact of pipeline construction on rural roads, there would be a recognition that “lane closures” do not adequately represent the full scope of the disruption that will occur or the impact of concentrating all of the existing rural traffic along with the massive amount of construction related traffic onto the limited alternate rural roads.

Instead, consultant “kicks the can down the road” just as applicant has done and continues to do (see section “I”, pg.6 above and previous testimony from RFPD10) by suggesting “well-documented action plans be established prior to site work and construction....” Consultant adds a new suggestion to the mix: *“if road closures result in shorter response times from neighboring mutual aid fire stations, a policy should be established to include those resources as automatic aid for calls in those restricted access areas of the response area.”* This would extend the impacts of facility construction to additional emergency response agencies and impact “unit availability” in their service areas.

Applicant has had an enormous amount of time to address this issue and has failed to do so. The only possible conclusion is that construction of these proposed projects will wreak havoc on the transportation system of this rural area and cause delays or require route changes constantly for the duration of this lengthy construction process. This element alone “requires services beyond those currently provided or planned for in the future” and represents an unavoidable hazardous condition.

Applicant:

U.) Ex.I.91 pg. 11, Consultant responds to Finding #6 which addresses increased call load on “unit availability” Consultant repeats previous information regarding current call load at Station 76.

RFPD10 Response:

This issue has been addressed previously in section P.) pg. 10 of this testimony.

Applicant:

V.) Ex. I.91, pg.11, Consultant responds to Finding #19 regarding Hazardous Materials that will be utilized in large volumes, hundreds of hazardous material deliveries annually and the potential for release of these hazardous materials during transport, off-loading and feed equipment failure. Consultant refers to Section 3 of his report regarding applicant's HMMP and Section 4.3 where consultant acknowledges "that historical data cannot be utilized to rule out any possibility of a future hazardous materials incident."

RFPD10 RESPONSE:

RFPD10 has previously provided written testimony that addresses, in detail, the many hazardous conditions approval of this proposed project will create in our service area (see RFPD10 testimony dated 12/22/22; 6/26/23; 8/3/23 and this document). Consultant presents no new information that has not been previously addressed.

Applicant:

W.) Ex.I.91 pg. 12-13, Consultant responds to certain comments made in RFPD10 testimony(6/26/23) in response to the May 8, 2023 memorandum from Winterbrook consultants.

RFPD10 RESPONSE:

Consultant refers to their previous comments that RFPD10 has addressed previously in this testimony.

Applicant:

X.) Ex.I.91, pg 14-15. Consultant cites NFPA 1710 Standards

RFPD10 RESPONSE:

RFPD10 does not dispute NFPA 1710 but rejects consultant's assertion that our "primary concern was response related to special operations incidents, specifically hazardous materials response and technical rescue/confined space incidents." RFPD10 has provided extensive testimony regarding a litany of hazardous conditions related to applicant's proposed project. Consultant's statement is seriously misinformed.

Applicant:

Y.) Ex.I.91, pg. 15-18, provides historical data related to the operation water treatment and waste water treatment plants.

RFPD10 RESPONSE:

Consultant acknowledges the fact that historic data cannot be utilized to rule out the possibility of a hazardous materials incident and RFPD10 questions the relevancy of past operations history earlier in this testimony. This conclusion is especially relevant in light of the industrial-scale of the proposed filtration plant, massive amounts of hazardous materials that will be transported to, stored and utilized at the plant and the fact that the PWB has no prior experience operating a treatment facility like the one proposed in this land use application.

This facility should be located within the Urban Growth Boundary where fully staffed, fully equipped emergency services are available with adequate back up support in close proximity.

Conclusion:

RFPD10 has reviewed all new applicant information provided in the initial open record period and provided responses to relevant portions as covered in this testimony. Applicant has not met its burden of proof with regard to the 3 criteria that RFPD10 has consistently focused attention on as they relate to our responsibility to speak for public safety and emergency services in this rural community. Specifically:

- The applicant acknowledges in numerous documents that construction and operation of this facility will create a variety of hazardous conditions that applicant proposes to “mitigate” because it is understood that these hazards cannot possibly be eliminated. Applicant’s HMMP acknowledges the risk of hazardous material spills, fires and explosions. In response, applicant’s proposed training includes “potential realistic scenarios that could be encountered at the facility.”

- The applicant has failed to fully identify the hazardous materials, their quantities, location etc. that will be used during construction and how those materials will be transported between the many construction areas (i.e. pipelines).

- In the case of the nearly 1,000 deliveries of hazardous materials that are forecast for the facility, applicant merely shifts the responsibility to others and relies on federal or state regulations, “highly trained drivers” and contract provisions that hold chemical vendors accountable.

- The years long construction that will heavily impact rural roads safety and inundate this rural community with 308,000 heavy truck trips and 700,000 work force trips. These rural roads are seriously deteriorated, lack shoulders or any accommodation for pedestrians, bicyclists etc. Applicant's proposed project will require lengthy detours, closures, and delays thereby concentrating local, farm, and non-motorized traffic onto other sub-standard rural roads and will be forced to share those roads with all of the construction related traffic. Multco's Comprehensive Transportation Plan states: **"The primary transportation issue in Multnomah County's rural areas is safety."** Applicant relies on flawed Traffic Impact Analyses and has failed to deliver any credible plan for traffic management and instead provides vague promises about contractors addressing that at some future point.
- RFPD10's testimony addressed services that are unavailable at Station 76 and concerns about delayed response times. Applicant responds through a consultant from South Carolina that asserts that's not a problem because NFPA doesn't establish a response time for speciality responses and construction related delays are not uncommon and can be addressed with a detailed plan.
- Applicant has promised to provide immediate passage of emergency response vehicles but has never provided any specific plan despite having known about this issue since at least January of 2022. Instead, applicant states that their future plan will require emergency responders to "call ahead", or submit comments if the plan isn't working so contractors can try to remedy problems, or "create a policy" to have mutual aid agencies respond if RFPD10 responders cannot respond in a timely manner.

For the many reasons detailed in this and the three previous testimonies we have submitted, RFPD10 remains resolute in our recommendation that Application T-3-2022-16220 be denied.

Thank you for considering our testimony.

Supplemental Testimony in Opposition dated August 31, 2023

Exhibit 1

- Safety Data Sheet – Carbon Dioxide

Exhibit 2

- Safety Data Sheet – Ammonium Sulfate

Praxair Safety Data Sheet

Product: Carbon Dioxide

SDS No. P-4574-L
May 2015

1. Identification

Product Identifier: Carbon Dioxide **Trade Names:** Carbon Dioxide, Medipure® Carbon Dioxide

Recommended Uses: Industrial: analytical, lasers; semiconductor process gas; supercritical fluid extraction

Restrictions on Use: Use only as directed.

Supplier: Praxair, Inc., 39 Old Ridgebury Road Danbury, CT 06810-5113 USA

Emergency Telephone Numbers: *

Onsite emergencies: 1-800-645-4633

CHEMTREC: USA: 1-800-424-9300

International: 001-703-527-3887, Contract: 17729

* Call emergency numbers only for spills, leaks, fire, exposure, or accidents involving this product. For routine information, contact your supplier, Praxair sales representative, or call 1-800-772-9247.

2. Hazards Identification

EMERGENCY OVERVIEW

WARNING! Liquefied gas under pressure.



Contains gas and liquid under pressure; may explode if heated.

Can cause rapid suffocation.

May cause dizziness and drowsiness.

Can increase respiration and heart rate.

May cause nervous system damage.

May cause frostbite.

→ **OSHA REGULATORY STATUS:** This material is considered hazardous by the OSHA Hazard Communications Standard (29 CFR 1910.1200).

Hazard Classification: Gases Under Pressure – Liquefied Gas

Precautionary Statements: Protect from sunlight. Store in a well-ventilated place.

← A vertical line in the left margin indicates revised or new material.

This is a general revision; please read entire document.

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Exhibit 1

Praxair Safety Data Sheet

Product: Carbon Dioxide

SDS No. P-4574-L
May 2015

3. Composition/Information on Ingredients

This section covers materials of manufacture only. See sections 5, 8, 10, 11, and 16 for information on by-products generated during use in welding and cutting or as a result of exposure to fire.

See section 16 for important information about mixtures.

Chemical Name	Common Name and Synonyms	CAS NUMBER	CONCENTRATION
Carbon Dioxide	Carbonic anhydride, carbonic acid gas, refrigerant gas R744	124-38-9	>99%

* The symbol > means "greater than."

4. First Aid Measures

INHALATION: Immediately remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, qualified personnel may give oxygen. Call a physician.

SKIN CONTACT: For exposure to cold vapor or solid carbon dioxide (dry ice), immediately warm frostbite area with warm water not to exceed 105°F (41°C). In case of massive exposure, remove contaminated clothing while showering with warm water. Call a physician.

EYE CONTACT: For exposure to cold vapor or solid carbon dioxide (dry ice), immediately flush eyes thoroughly with warm water for at least 15 minutes. Hold the eyelids open and away from the eyeballs to ensure that all surfaces are flushed thoroughly. See a physician, preferably an ophthalmologist, immediately.

SWALLOWING: An unlikely route of exposure. This product is a gas at normal temperature and pressure.

NOTES TO PHYSICIAN: Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient.

5. Fire Fighting Measures

FLAMMABLE PROPERTIES: Nonflammable

Protective Equipment and Precautions for Firefighters: Firefighters should wear personal protective equipment and fire-fighting turnout gear as appropriate for surrounding fire.

SUITABLE EXTINGUISHING MEDIA: Carbon dioxide cannot catch fire but cylinders exposed to fire may explode. Use media appropriate for surrounding fire.

PRODUCTS OF COMBUSTION: Not applicable.

PROTECTION OF FIREFIGHTERS: WARNING! High-pressure liquid and gas. Evacuate all personnel from danger area. Immediately deluge cylinders with water from maximum distance until cool; then move them away from fire area if without risk. Self-contained breathing apparatus may be required by rescue workers. On-site fire brigades must comply with OSHA 29 CFR 1910.156 and applicable standards under 29 CFR 1910 Subpart L—Fire Protection.

Praxair Safety Data Sheet

Product: Carbon Dioxide

SDS No. P-4574-L
May 2015

Specific Physical and Chemical Hazards: Heat of fire can build pressure in cylinder and cause it to rupture. No part of cylinder should be subjected to a temperature higher than 125°F (52°C). Carbon dioxide cylinders are typically equipped with a pressure relief device. (Exceptions may exist where authorized by DOT.)

6. Accidental Release Measures

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

WARNING! High-pressure liquid and gas. Rapid release of gaseous carbon dioxide through a pressure relief device (PRD) or valve can result in the formation of dry ice, which is very cold and can cause frostbite.

PERSONAL PRECAUTIONS: Carbon dioxide is an asphyxiant. Lack of oxygen can kill. Use self-contained breathing apparatus where needed. See Section 11.

PERSONAL PROTECTIVE EQUIPMENT (PPE): See Section 8, Exposure Control/Personal Protection.

EMERGENCY PROCEDURES: Evacuate all personnel from danger area. Shut off leak if you can do so without risk. Ventilate area or move cylinder to a well-ventilated area. Test for sufficient oxygen, especially in confined spaces, before allowing reentry.

Methods and Materials for Containment and Cleaning Up: Prevent waste from contaminating the surrounding environment. Discard any product, residue, disposable container, or liner in an environmentally acceptable manner, in full compliance with federal, state, and local regulations. If necessary, call your local supplier for assistance.

7. Handling and Storage

PRECAUTIONS TO BE TAKEN IN HANDLING: Protect from sunlight.

Avoid breathing gas. Do not get liquid in eyes, on skin, or clothing. **Protect cylinders from damage.** Use a suitable hand truck to move cylinders; do not drag, roll, slide, or drop. Never attempt to lift a cylinder by its cap; the cap is intended solely to protect the valve. **Never insert an object (e.g., wrench, screwdriver, pry bar) into cap openings;** doing so may damage the valve and cause a leak. Use an adjustable strap wrench to remove over-tight or rusted caps. **Open valve slowly.** If valve is hard to open, discontinue use and contact your supplier. Keep cylinder upright when in use. **Never apply flame or localized heat directly to any part of the cylinder.** High temperatures may damage the cylinder and could cause the pressure relief device to fail prematurely, venting the cylinder contents. For other precautions in using carbon dioxide, see section 16.

PRECAUTIONS TO BE TAKEN IN STORAGE: Store in a well-ventilated place.

Gas can cause rapid suffocation due to oxygen deficiency. Store and use with adequate ventilation. Store only where temperature will not exceed 125°F (52°C). Carbon dioxide is heavier than air. It tends to accumulate near the floor of an enclosed space, displacing air and pushing it upward. This creates an oxygen-deficient atmosphere near the floor or in pits and trenches. Ventilate space before entry. Verify sufficient oxygen concentration. Close cylinder valve after each use; keep closed even when empty. **Prevent reverse flow.** Reverse flow into

Praxair Safety Data Sheet

Product: Carbon Dioxide

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May 2015

cylinder may cause rupture. Use a check valve or other protective device in any line or piping from the cylinder. **Do not strike an arc on the cylinder.** The defect produced by an arc burn could lead to cylinder rupture. Do not ground the cylinder or allow it to become part of an electrical circuit. **Firmly secure cylinders upright to keep them from falling or being knocked over.** Screw valve protection cap firmly in place by hand. **Store full and empty cylinders separately.** Use a first-in, first-out inventory system to prevent storing full cylinders for long periods.

RECOMMENDED PUBLICATIONS: For further information on storage, handling, and use, see Praxair publications P-14-153, *Guidelines for Handling Gas Cylinders and Containers*; P-15-073, *Safety Precautions for Carbon Dioxide*; and P-3499, *Safety Precautions and Emergency Response Planning*. Obtain from your local supplier.

8. Exposure Controls/Personal Protection

See section 16 for important information on by-products generated during use in welding and cutting.

COMPONENT	OSHA PEL	ACGIH TLV (2012)
Carbon dioxide	5,000 ppm	5,000 ppm TWA, 30,000 ppm 15-min STEL

IDLH = 40,000 ppm.

ENGINEERING CONTROLS:

Local Exhaust. Use a local exhaust system, if necessary, to keep the concentration of carbon dioxide below all applicable exposure limits in the worker's breathing zone.

Mechanical (General). Under certain conditions, general exhaust ventilation may be acceptable to keep carbon dioxide below the exposure limits.

Special. WARNING: Concentration levels of carbon dioxide about 1 percent are dangerous—see Section 11. Praxair recommends continuous monitoring with alarms to indicate unsafe conditions before and during potential personnel exposure. Use appropriate monitoring devices to ensure a safe oxygen level (minimum of 19.5 percent) and a safe carbon dioxide level.

Other. None

PERSONAL PROTECTIVE EQUIPMENT (PPE):

Skin Protection. Wear insulated neoprene gloves for cylinder handling; welding gloves for welding. Metatarsal shoes for cylinder handling. Select in accordance with OSHA 29 CFR 1910.132, 1910.136, and 1910.138. See section 16 for requirements when using carbon dioxide or carbon dioxide mixtures in welding and cutting.

Eye/Face Protection. Select in accordance with OSHA 29 CFR 1910.133. See section 16 for requirements when using carbon dioxide or carbon dioxide mixtures in welding and cutting.

Respiratory Protection. None required under normal use. An air-supplied respirator must be used in confined spaces. Respiratory protection must conform to OSHA rules as specified in 29 CFR 1910.134. Select per OSHA 29 CFR 1910.134 and ANSI Z88.2.

Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 12.28.2014

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Ammonium Sulfate,

SECTION 1 : Identification of the substance/mixture and of the supplier

Product name : Ammonium Sulfate,

Manufacturer/Supplier Trade name:

Manufacturer/Supplier Article number: S25176A

Recommended uses of the product and uses restrictions on use:

Manufacturer Details:

AquaPhoenix Scientific
9 Barnhart Drive, Hanover, PA 17331

Supplier Details:

Fisher Science Education
15 Jet View Drive, Rochester, NY 14624

Emergency telephone number:

Fisher Science Education Emergency Telephone No.: 800-535-5053

SECTION 2 : Hazards identification

Classification of the substance or mixture:



Irritant

Skin irritation, category 2
Eye irritation, category 2A
Acute toxicity (oral, dermal, inhalation), category 3

Eye irrit. cat 2

Skin Sens, cat 2

STOT SE 3

AcTox Oral 4

Hazards Not Otherwise Classified - Combustible Dust

Signal word :Warning

Hazard statements:

Harmful if swallowed

Causes skin irritation

Causes serious eye irritation

May cause respiratory irritation

Precautionary statements:

Wash ... thoroughly after handling

Do not eat, drink or smoke when using this product

Avoid breathing dust/fume/gas/mist/vapours/spray

Use only outdoors or in a well-ventilated area

Wear protective gloves/protective clothing/eye protection/face protection

Specific treatment (see supplemental first aid instructions on this label)

Rinse mouth

Take off contaminated clothing and wash before reuse

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

IF ON SKIN: Wash with soap and water

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Exhibit 2

Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 12.28.2014

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Ammonium Sulfate,

If skin irritation occurs: Get medical advice/attention

If eye irritation persists get medical advice/attention

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do.

Continue rinsing

Store locked up

Store in a well ventilated place. Keep container tightly closed

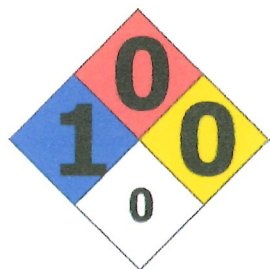
Dispose of contents/container to ...

Combustible Dust Hazard: :

May form combustible dust concentrations in air (during processing).

Other Non-GHS Classification:

WHMIS
NFPA/HMIS



NFPA SCALE (0-4)

Health	1
Flammability	0
Physical Hazard	0
Personal Protection	X

HMIS RATINGS (0-4)

SECTION 3 : Composition/information on ingredients

Ingredients:

CAS 7783-20-2

Ammonium Sulfate,ACS

>95 %

Percentages are by weight

SECTION 4 : First aid measures

Description of first aid measures

After inhalation: Move exposed individual to fresh air. Loosen clothing as necessary and position individual in a comfortable position. Seek medical advice if discomfort or irritation persists. If breathing difficult, give oxygen.

After skin contact: Wash affected area with soap and water. Rinse/flush exposed skin gently using water for 15-20 minutes. Seek medical advice if discomfort or irritation persists.

After eye contact: Protect unexposed eye. Rinse/flush exposed eye(s) gently using water for 15-20 minutes. Remove contact lens(es) if able to do so during rinsing. Seek medical attention if irritation persists or if concerned.

After swallowing: Rinse mouth thoroughly. Do not induce vomiting. Have exposed individual drink sips of water. Seek medical attention if irritation, discomfort or vomiting persists.

Most important symptoms and effects, both acute and delayed:

Irritation, Nausea, Headache, Shortness of breath.;

Indication of any immediate medical attention and special treatment needed:

If seeking medical attention, provide SDS document to physician.

Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 12.28.2014

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Ammonium Sulfate,

SECTION 5 : Firefighting measures

Extinguishing media

Suitable extinguishing agents: If in laboratory setting, follow laboratory fire suppression procedures. Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition

For safety reasons unsuitable extinguishing agents:

Special hazards arising from the substance or mixture:

Combustion products may include carbon oxides or other toxic vapors. Thermal decomposition can lead to release of irritating gases and vapors. Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

Advice for firefighters:

Protective equipment: Use NIOSH-approved respiratory protection/breathing apparatus.

Additional information (precautions): Move product containers away from fire or keep cool with water spray as a protective measure, where feasible. Use spark-proof tools and explosion-proof equipment.

SECTION 6 : Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Wear protective equipment. Transfer to a disposal or recovery container. Use spark-proof tools and explosion-proof equipment. Use respiratory protective device against the effects of fumes/dust/aerosol. Keep unprotected persons away. Ensure adequate ventilation. Keep away from ignition sources. Protect from heat. Stop the spill, if possible. Contain spilled material by diking or using inert absorbent.

Environmental precautions:

Prevent from reaching drains, sewer or waterway. Collect contaminated soil for characterization per Section 13

Methods and material for containment and cleaning up:

If in a laboratory setting, follow Chemical Hygiene Plan procedures. Place into properly labeled containers for recovery or disposal. If necessary, use trained response staff/contractor. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Collect solids in powder form using vacuum with (HEPA filter)

Reference to other sections:

SECTION 7 : Handling and storage

Precautions for safe handling:

Minimize dust generation and accumulation. Wash hands after handling. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Follow good hygiene procedures when handling chemical materials. Do not eat, drink, smoke, or use personal products when handling chemical substances. If in a laboratory setting, follow Chemical Hygiene Plan. Use only in well ventilated areas. Avoid generation of dust or fine particulate. Avoid contact with eyes, skin, and clothing.

Conditions for safe storage, including any incompatibilities:

Store in a cool location. Provide ventilation for containers. Avoid storage near extreme heat, ignition sources or open flame. Store away from foodstuffs. Store away from oxidizing agents. Store in cool, dry conditions in well sealed containers. Keep container tightly sealed. Store with like hazards

SECTION 8 : Exposure controls/personal protection



Fwd: Document dropped off from Multnomah Rural Fire Protection No. 10

1 message

Scott Robison <scott.robison@multco.us>

Wed, Sep 6, 2023 at 11:39 AM

To: LUP Comments <lup-comments@multco.us>, Lisa Estrin <lisa.m.estrin@multco.us>

Lisa,

I'm forwarding to LUP-Comments to have them all in one inbox.

Scott

----- Forwarded message -----

From: **Land Use Planning** <land.use.planning@multco.us>

Date: Wed, Sep 6, 2023 at 11:37 AM

Subject: Document dropped off from Multnomah Rural Fire Protection No. 10

To: Scott Robison <scott.robison@multco.us>, Lisa Estrin <lisa.m.estrin@multco.us>

Hello,

See Attached - this document was dropped off about 10 minutes ago

Tracey

--

Multnomah County

Department of Community Services - Land Use Planning Division

T: 503-988-3043 | E: land.use.planning@multco.us

<https://multco.us/landuse>

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Scott Robison

Administrative Analyst I Land Use

Department of Community Services I Multnomah County

Phone: 503-988-0187 | scott.robison@multco.us



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