BEFORE THE U.S. INTERNATIONAL TRADE COMMISSION

Cold-Drawn Mechanical Tubing from China, Germany, India, Italy, Korea, and Switzerland	)	Inv. Nos. 701-TA-576-577 and 731-TA-1362-1367 (Preliminary)

Testimony of Jim Demetrios Karayannides, Karay Metals Inc.

Mr. Chairman and Members of the Commission Staff:

1. Good morning. My name is Jim Karayannides and I am the President of Karay Metals Inc. I have been in the business of distributing pipe and tube products, including cold-drawn tube, for over 40 years. Karay Metals which is located in Woodstock, New York, has been an importer of high quality cold drawn steel tubes from leading offshore tube mills for many years. I would like to talk to you today about the U.S. market for cold drawn mechanical tubing over the last few years and about certain product distinctions in the market.

2. The past three years were difficult for the tubing market but market conditions have improved significantly in late 2016 into 2017. 2014 was expected to be a good year, particularly with respect to the agricultural equipment (AG) business. Unfortunately the year began

with a very bad winter. The increasing rig count in the oil & gas sector provided some business but not enough to shoulder the market. Inventories increased, as the agricultural sector started to lose steam in the second quarter of 2014 due to the drop in grain prices and general slowdown in the farm sector. Construction was still down.

3. Beginning in the 3rd quarter of 2016, manufacturing began to increase at a strong pace, bringing new business for many suppliers.

4. 2017 has ushered in an increase in demand from construction and the oil & gas market, providing mills with welcome relief, and customers with increased prices. The ISM (Institute of Supply Management) has estimated there will be a 4.20% increase in capacity in 2017 in industrial manufacturing. New orders have also increased for the domestic tube mills.

5. Being in the thick of the supply chain and going through one of the worst markets in memory, it is not surprising that the domestic manufacturers of cold-drawn mechanical tubing have experienced declines in production and shipments and weak profitability. But this would not have been caused by imports, but rather by the difficult

market conditions that I just described including the pressure from powerful end users to cut prices. Additionally, it is an important feature of this market that large powerful end users, OEMs, such as automotive and agricultural equipment producers, control pricing. So when their markets were depressed, they exerted a lot of downward pricing pressure.

6. It is a well-established feature of the U.S. market that the cold-drawn tube market is segmented, with imports filling an important role. Specifically, many of the domestic mills either do not produce the smaller sizes of cold drawn welded carbon steel tubes or do not do so in sufficient volume to satisfy demand. Smaller diameter tubes are less efficient to produce because of the speed of the production line. Smaller tubes produce less tonnage per foot and therefore per hour of production time. Domestic producers want to produce more tons and production of smaller sizes would reduce their production line time. For example, few, if any US mills can produce seamless diesel injection tubing, used in the building of truck engines. This tube is 0.250" round and has special OD/ID ratios. PTC-Alliance, a petitioner, chose to import the

smaller mechanical tube sizes from Tube Products of India (an Indian tube producer) for several years. Imports fill this important role in the market and do not compete with the domestic producers for these small sizes as the domestic producers are simply not present in that market segment.

7. It is my belief that domestic production cannot supply the entire market for cold-drawn mechanical tubing generally. Many service centers also fear there will be shortages in the market if imports are not allowed to continue. It would be helpful to know the size ranges of these U.S. producers in terms of their production and capacity, particularly under .219 inch wall thicknesses. At present, flat rolled steel producers have been placing customers on allocation, including the tube mills, due to the recent AD/CVD cases on HRC for example. Delivery delays are already occurring. This petition will have a further negative effect on the supply chain for downstream US manufacturers.

8. I am also concerned that reduction in imports of DOM welded cold drawn carbon steel tubes would simply lead to an increase in imports of the finished components, including finished cylinder tubes.

This would negatively affect the US fabricators of these higher value products without any benefit to the domestic mills.

9. In my remaining time this morning, I would like to call your attention to what I believe is a significant like product issue. Although the Petitioners have described this as a case against cold-drawn mechanical tubing, the scope of the petition in fact also covers one very different product – cold drawn hydraulic fluid line pressure tubing. The latter product, which is produced to the SAE J524 and to SAE J525 is not a mechanical tube. Significantly, A-179 which is also pressure tubing is specifically excluded from the case.

10. A review of the websites of petitioners confirms that all U.S. producers clearly distinguish their production and sales between mechanical tubing and pressure tubing. As I said, J524 is a specialized type of pressure tubing used for hydraulic applications.

11. The end uses are very different. The J524 pressure tubing is an annealed cold drawn low carbon hydraulic tube and is used as a transport vehicle for air, fluid and gases under pressure. They are used for hydraulic assemblies for power equipment and hydraulic and

pneumatic fluid lines and in other applications that require tubing suitable for flaring and bending. Just look under the hood of your car to see these tubes. No mechanical tubing subject to this case can be substituted.

12. There are significant physical differences. Cold drawn mechanical tubing, (ASTM A513 type 5 and 6), generally has a higher carbon and manganese content, tighter size tolerances, and higher minimum yield strengths than pressure tubing. Because cold drawn mechanical tubing is used in applications that require high yield and high tensile strength, hardness and an increased strength to weight ratio, the product is manufactured to very different chemistries and specifications than pressure tubing. Mechanical tubing is used to produce bushings, spacers, bearings, axles, steering columns, and other mechanical parts for automobiles, trucks, aircraft, construction, and agricultural and drilling equipment.

13. The manufacturing process for J524 pressure tubing is also significantly different. Following the cold-drawing process, the tubing must undergo heat treatment to achieve a soft normalized temper for

ductility. There are significant additional testing requirements such as flaring, reverse flattening, and pressure proof tests. Cold-drawn mechanical tubing undergoes a different type of heat treatment to achieve a stress-relieved temper and does not require the additional testing processes or require the production equipment needed for these processes.

14. As the result of these physical differences in chemistry, mechanical properties, and production process, cold-drawn hydraulic tubing and cold-drawn mechanical tubing are not interchangeable. There can be no overlap in end uses between these two products due to their very different physical properties. Cold drawn mechanical tubing cannot be used in cold drawn pressure tubing applications because mechanical tubing is too rigid and cannot be flared and bent as needed for these applications. Conversely, hydraulic tubing cannot be used in mechanical tubing applications because the pressure tubing lacks the required tensile strength, yield strength and hardness required for mechanical applications.

15. Customers and producers clearly perceive cold drawn *hydraulic* tubing and cold drawn *mechanical* tubing as distinct products. Producers and distributors do not include J524 products among cold-drawn mechanical tubing specifications. Furthermore, the composition of the industries producing the two products is different. It is my understanding that none of the petitioners in this case even produces J524 cold drawn hydraulic tubing. I am aware of only one domestic producer, Plymouth Tube Company, that actually produces J524 tubing. Plymouth Tube's website clearly distinguishes between its offerings of mechanical tubing and hydraulic pressure tubing. At present, deliveries are extended to 5 months ex-mill compared to the normal 6 week delivery time for mechanical tubing. This is due to issues associated with raw material sourcing. I understand that this company imports hollows to make this product.

16. Although I understand that Michigan Seamless claims to have the capability to produce J524, I don't know from personal experience whether they have ever produced and sold it. Finally, there are significant differences in price between the two products. As a

distributor of a wide variety of tube products I stock both cold-drawn mechanical tubing and cold-drawn hydraulic tubing. The prices of cold drawn hydraulic tubing are typically approximately 20 percent higher or more.

17. Thank you and I am prepared to answer any questions you may have.