

Part XV--Proposed New Industry Structure for Oil and Gas Extraction; Mining, except Oil and Gas; Support Activities for Mining

Section A-- Structure

NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM

(NAICS)

Agreement Number 26

This Document represents the proposed agreement on the structure of the North American Industry Classification System (NAICS) for the following industries:

Oil and Gas Extraction

Mining, Except Oil and Gas

Support Activities for Mining

The detailed NAICS structure along with a brief description of the structure is attached (Attachments 1 and 2). Each country agrees to release a copy of the proposed NAICS structure to interested data users. Comments received will be shared among the countries and additional discussions will be held before a final decision on the structure is made. Each country may add additional detailed industries, below the 4-digit level of NAICS, as necessary to meet national needs, so long as this additional detail aggregates to a 4-digit NAICS level in order to ensure full comparability among the three countries. This NAICS structure was presented and provisionally accepted at the NAICS Committee meeting held on November 8 and November 9, 1995 in Washington, D.C.

Accepted	Signature	Date
Canada	/S/ Jacob Ryten	11/9/95
Mexico	/S/ Enrique Ordaz	11/9/95
United States	/S/ Jack E. Triplett	11/9/95

ATTACHMENT 1-- NAICS STRUCTURE

XX	Oil and Gas Extraction
XXX	Oil and Gas Extraction
XXXX	Oil and Gas Extraction
XX	Mining, Except Oil and Gas
XXX	Coal Mining
XXXX	Coal Mining
XXX	Metal Ore Mining
XXXX	Iron Mining
XXXX	Gold and Silver Mining
XXXX	Copper, Nickel, Lead, and Zinc Mining
XXXX	Other Metal Ore Mining

XXX	Non-Metallic Mineral Mining and Quarrying
XXXX	Stone Mining and Quarrying
XXXX	Sand, Gravel, Clay, Ceramic, and Refractory Mineral Mining and Quarrying
XXXX	Other Non Metallic Mineral Mining and Quarrying
XX	Support Activities for Mining
XXX	Support Activities for Mining
XXXX	Support Activities for Mining

Attachment 2--North American Industry Classification System

Draft Classification for:

Mining

Representatives of the statistical agencies of Canada, Mexico, and the United States agree to a draft industry classification for these industries.

This draft classification applies to the sector Mining. This sector is subdivided into three subsectors and five industry groups: Oil and Gas Extraction, Coal Mining, Metal Ore Mining, Non-Metallic Mineral Mining and Quarrying, and Support Activities for Mining. The five industry groups are subdivided into 10 industries.

A General Outline

The Mining sector includes the extraction of liquids and gases such as petroleum and natural gas by the operation of wells and the extraction of naturally occurring minerals through underground or surface mining. Also included is the beneficiating of the ores by crushing, grinding, washing, drying, leaching, and other means. The sector is divided into three subsectors, two being based on the types of minerals extracted and beneficiated and one being support activities for the extraction.

The existing industry classifications of Canada, Mexico, and the United States were remarkably similar in their overall structure for mining. There were significant differences in the classifications at the detailed level, as the detailed level varied because of the specific mineral deposits that were significant to each country. The existing classifications were for the most part inherently production oriented and satisfactory to data users. The structure maximizes the comparability between the three countries and makes modest enhancements to the production orientation of the classification.

Limitations and Constraints of the Classification

The extraction of any mineral is conditional on the presence of a suitable mineral deposit. Generally, the extraction method varies according to the type of deposit mined as does the beneficiating process.

An approach that distinguished surface and underground mining as a basis for defining industry groups was considered but in the case of many metals and non-metals the activity in each was too small to permit separation. On the other hand the difference in the beneficiating

processes (agglomerating, crushing, chemical, leaching etc.) required for different ores provided the basis for distinguishing production processes. The type of mineral deposit was therefore considered to be a good proxy for the production process in most cases of metal mining. However, these deposits vary significantly among the three countries. For many types of minerals the number of deposits in any one country may be too small to permit publishing data on that industry for that country. This limited the number of possible industries. The industries are therefore based on the type of minerals that generally occur together in a mineral deposit in all three countries. For example, the occurrence of combinations of copper, lead, zinc and nickel in the same mineral deposit is common among the three countries. In the case of non-metal mining, the quarrying of stone, above ground, requires precision cutting of large blocks of stone which is a process very different from the process of extracting sand, gravel, clay, ceramic and refractory minerals.

Relationship to ISIC

Most 4-digit industries in this sector are contained within Divisions 10-14, Mining and Quarrying, of the current International Standard Industrial Classification of all Economic Activities (ISIC Revision 3) of the United Nations. Generally, the industries can be reaggregated to the ISIC divisions. However, there are some differences: ISIC includes peat with coal in Division 10, Mining of Coal and Lignite, Extraction of Peat, whereas peat extraction is included in NAICS industry Non Metallic Mineral Mining and Quarrying. Although peat is similar to coal in that it can be used as a fuel, the extraction and beneficiating processes are distinctly different from coal and are similar to the processes involved with non metallic minerals. It should be noted that in North America peat is seldom used as fuel but rather as a soil conditioner. ISIC Division 12, Mining of Uranium and Thorium Ores, is not supportable as a NAICS industry.

Some Changes to the National Classifications

For Canada, CSIC 0611, Gold Mines, has been combined with the silver part of CSIC 0614, Silver-Lead-Zinc Mines, to form the NAICS four digit industry Gold and Silver Mining. Gold mining and silver mining are separated at the national five digit level. Silver mining becomes a null set as it does not exist in Canada. Silver is mined only as a by product of lead and zinc mining in Canada.

CSIC 0612, Copper and Copper-Zinc Mines, has been combined with CSIC 0613, Nickel-Copper Mines, plus the lead and zinc part of CSIC 0614 to form NAICS industry Copper, Nickel, Lead, and Zinc Mining.

CSIC 0615, Molybdenum Mines, was combined with CSIC 0616, Uranium Mines, and CSIC 0619, Other Metal Mines, to form NAICS Other Metal Mining.

CSIC 0811, Granite Quarries; CSIC 0812, Limestone Quarries; CSIC 0813, Marble Quarries; and CSIC 0814, Sandstone Quarries, becomes NAICS industry Mining and Quarrying of Stone. However these 4 digit industries are restored for national detail.

CSIC 0821, Sand and Gravel Pits, has been combined with CSIC 0815, Shale Quarries, and the crude clays from clay pits part of CSIC 3511, Clay Products, to form NAICS industry Sand, Gravel, Clay, Ceramic and Refractory Mineral Mining and Quarrying. However, CSIC

0821, Sand and Gravel Pits, is restored at the level of national detail. There are no known establishments primarily engaged in extracting clay in Canada, although extraction of clay exists by the manufacturers of clay products.

For Mexico, peat mining has been split from CMAP 210000, Mining and /or Beneficiation of Coal, to be included in NAICS industry Non Metallic Mineral Mining and Quarrying. The remaining portion of CMAP 21000 is equivalent to NAICS industry Coal Mining. Peat extraction is of little statistical significance in Mexico.

For Mexico, the nickel part of CMAP 232006, Mining and /or Beneficiation of Other Nonferrous Metallic Ores, has been split out. This split will have little statistical impact as there is only a very small amount of nickel mining in Mexico. The split is combined with CMAP 232003, Mining and /or Beneficiation of Industrial Ore with a High Lead and Zinc Content, and CMAP 232005, Mining and /or Beneficiation of Ore with a High Copper Content, to form the NAICS four digit industry Copper, Nickel, Lead, and Zinc Mining.

The creation of the Support Activities for Mining subsector in is an important change for Mexico, since such activities are not represented in the Mexican classification. However, the coverage of the mining sector is very close to the current mining sector in CMAP.

For the United States, a structural change involved moving the support activity industries from their respective 1987 SIC Major Groups and bringing them all together in the NAICS structure under the subsector Support Activities for Mining.

The nickel ore mining part of 1987 SIC 1061, Ferroalloy Ores, Except Vanadium, has been combined with 1987 SIC 1021, Copper Ores, at the national level. This has a small statistical impact as production is relatively insignificant. This national level industry plus 1987 SIC 1031, Lead and Zinc Ores, also maintained at the national level, form NAICS industry Copper, Nickel, Lead, and Zinc Mining.

The bituminous limestone and bituminous sandstone part of 1987 SIC 1499, Miscellaneous Nonmetallic Minerals, Except Fuels, is moved out of Non Metallic Minerals Mining to NAICS industry Mining and Quarrying of Stone.

Achievement of Objectives

The classification meets the objectives for the North American Industry Classification System (NAICS). It includes industries that group establishments with similar production processes, that is, it applies the production-oriented economic concept. In the main, the hierarchical structure of the classification also follows the production concept.

Other objectives of the project are not as relevant in this area of the classification as in others. These objectives are the delineation of new and emerging industries, service industries and industries engaged in the production of advanced technologies. The industrial sector in question is relatively mature and uses relatively stable technology for extraction.

The industries are highly specialized, and they are economically significant. Disruptions to time series are minimal. The classification achieves comparability for the three participating countries. All countries agree on the detailed definitions of the industries.

Section B-Annex: United States National Industry Detail

As explained in the *Structure* presentation of this notice, for a number of reasons 4-digit

industries in the three NAICS industry subsectors presented in *Part XV, Section A-- Attachment 1*, contain less detail than is currently in the U.S. SIC system, and less detail than is required to meet important analytical requirements in the U.S. The three country agreement on NAICS envisions that each country may develop national detailed industries below the NAICS industry level, so long as the national detail can be aggregated to the classification, thus assuring full North American comparability.

The ECPC is proposing U.S. 5-digit industry detail for the three NAICS industry subsectors covered in Part XV of this notice. For cases where no 5-digit detail is shown, the ECPC is proposing that the NAICS 4-digit industries will also represent the most detailed U.S. industries.

TABLE 1

The definitions of status codes are as follows: E-existing industry; N-new industry R-revised industry; and * means "part of". The abbreviation NEC is used for Not Elsewhere Classified.

1997 NAICS and U.S. description	Status code	1987 SIC code	1987 SIC description
XX Oil and Gas Extraction			
XXX Oil and Gas Extraction			
XXXX Oil and Gas Extraction			
XXXXX Crude Petroleum and Natural Gas Extraction	E	1311	Crude Petroleum and Natural Gas
XXXXX Natural Gas Liquid Extraction	E	1321	Natural Gas Liquids
XX Mining except Oil and Gas			
XXX Coal Mining			
XXXX Coal Mining			
XXXXX Bituminous Coal and Lignite Surface Mining	E	1221	Bituminous Coal and Lignite Surface Mining
XXXXX Bituminous Coal Underground Mining	E	1222	Bituminous Coal Underground Mining
XXXXX Anthracite Mining	E	1231	Anthracite Mining
XXX Metal Ore Mining			
XXXX Iron Mining	E	1011	Iron Ores
XXXX Gold and Silver Mining			
XXXXX Gold Mining	E	1041	Gold Ores
XXXXX Silver Mining	E	1044	Silver Ores
XXXX Copper, Nickel, Lead and Zinc Mining			
XXXXX Copper and Nickel Mining	R	1021	Copper Ores
		*1061	Ferrous Ores, Except Vanadium (nickel)
XXXXX Lead and Zinc Mining	E	1031	Lead and Zinc Ores
XXXX Other Metal Ore Mining			
XXXXX Uranium-Radium-Vanadium Ores Mining	E	1094	Uranium-Radium-Vanadium Ores

XXXXX	Other Metal Ore Mining	R	*1061	Ferrous Ores, Except Vanadium (other ferroalloys except nickel)
			1099	Miscellaneous Metal Ores, NEC
XXX	Non-Metallic Mineral Mining and Quarrying			
XXXX	Stone, Mining and Quarrying			
XXXXX	Dimension Stone Mining and Quarrying	E	1411	Dimension Stone
XXXXX	Crushed and Broken Limestone Mining and Quarrying	E	1422	Crushed and Broken Limestone
XXXXX	Crushed and Broken Granite Mining and Quarrying	E	1423	Crushed and Broken Granite
XXXXX	Other Crushed and Broken Stone Mining and Quarrying	R	1429	Crushed and Broken Stone, NEC
			*1499	Miscellaneous Nonmetallic Minerals, Except Fuels (bituminous limestone and bituminous sandstone)
XXXX	Sand, Gravel, Clay, Ceramic and Refractory Mineral Mining and Quarrying			
XXXXX	Construction Sand and Gravel Mining	E	1442	Construction Sand and Gravel
XXXXX	Industrial Sand Mining	E	1446	Industrial Sand
XXXXX	Kaolin and Ball Clay Mining	E	1455	Kaolin and Ball Clay
XXXXX	Clay, Ceramic, and Refractory Mineral Mining	E	1459	Clay, Ceramic, and Refractory Minerals, NEC
XXXX	Other Non-Metallic Mineral Mining and Quarrying			
XXXXX	Potash, Soda, and Borate Mineral mining	E	1474	Potash, Soda, and Borate Minerals
XXXXX	Phosphate Rock Mining	E	1475	Phosphate Rock
XXXXX	Other Chemical and Fertilizer Mineral Mining	E	1479	Chemical and Fertilizer Mineral Mining, NEC
XXXXX	All Other Non-Metallic Mineral Mining	R	*1499	Miscellaneous Non-Metallic Minerals, Except Fuels (except bituminous limestone and bituminous sandstone)
XX	Support Activities for Mining			
XXX	Support Activities for Mining			
XXXX	Support Activities for Mining			
XXXXX	Support Activities for Metal Mining	E	1081	Metal Mining Services
XXXXX	Support Activities for Coal Mining	E	1241	Coal Mining Services

XXXXX	Drilling Oil and Gas Wells	E	1381	Drilling Oil and Gas Wells
XXXXX	Support Activities for Oil and Gas Field Exploration	E	1382	Oil and Gas Field Exploration Services
XXXXX	Other Oil and Gas Field Support Activities	E	1389	Oil and Gas Field Services, NEC
XXXXX	Support Activities for Non-Metallic Minerals Except Fuels	E	1481	Non-Metallic Minerals Services, Except Fuels

TABLE 2

The abbreviation “pt” means “part of”. @ means time series break has been created that is greater than 3% of the 1992 revenues for the 1987 SIC industry.

1987 SIC code	1987 SIC description	1997 U.S. description
1011	Iron Ores	Iron Ore Mining
1021	Copper Ores	Copper Mining
1031	Lead and Zinc Ores	Lead and Zinc Mining
1041	Gold Ores	Gold Mining
1044	Silver Ores	Silver Mining
1061	Ferroalloy Ores, Except Vanadium	
	Nickel Ore Mining	Copper and Nickel Mining (pt)
	Other Ferroalloys	Other Metal Ore Mining (pt)
1081	Metal Mining Services	Support Activities for Metal Mining
1094	Uranium-Radium-Vanadium Ores	Uranium-Radium-Vanadium Ore Mining
1099	Miscellaneous Metal Ores, NEC	Other Metal Ore Mining (pt)
1221	Bituminous Coal and Lignite Surface Mining	Bituminous Coal and Lignite Surface Mining
1222	Bituminous Coal Underground Mining	Bituminous Coal Underground Mining
1231	Anthracite Mining	Anthracite Mining
1241	Coal Mining Services	Support Activities for Coal Mining
1311	Crude Petroleum and Natural Gas	Crude Petroleum and Natural Gas Extraction
1321	Natural Gas Liquids	Natural Gas Liquid Extraction
1381	Drilling Oil and Gas Wells	Drilling Oil and Gas Wells
1382	Oil and Gas Field Exploration Services	Support Activities for Oil and Gas Field Exploration
1389	Oil and Gas Field Services, NEC	Other Oil and Gas Field Support Activities
1411	Dimension Stone	Dimension Stone Mining or Quarry
1422	Crushed and Broken Limestone	Crushed and Broken Limestone Mining or Quarrying

1423	Crushed and Broken Granite	Crushed and Broken Granite Mining or Quarrying
1429	Crushed and Broken Stone, NEC	Other Crushed and Broken Stone Mining or Quarrying (pt)
1442	Construction Sand and Gravel	Construction Sand and Gravel Mining
1446	Industrial Sand	Industrial Sand Mining
1455	Kaolin and Ball Clay	Kaolin and Ball Clay Mining
1459	Clay, Ceramic, and Refractory Minerals, NEC	Clay, Ceramic, and Refractory Mineral Mining
1474	Potash, Soda, and Borate Minerals	Potash, Soda, and Borate Mineral Mining
1475	Phosphate Rock	Phosphate Rock Mining
1479	Chemical and Fertilizer Mineral Mining, NEC	Other Chemical and Fertilizer Mineral Mining
1481	Non-Metallic Mineral Services, Except Fuels	Support Activities for Non-Metallic Minerals, Except Fuels
1499	Miscellaneous Non-Metallic Minerals, Except Fuels Bituminous Limestone and Bituminous Sandstone	Other Crushed and Broken Stone Mining or Quarrying (pt)
	Except Bituminous Limestone and Bituminous Sandstone	All Other Non-Metallic Mineral Mining

Description of Changes to the U.S. System

There were no new industries added to the 1997 industry structure for this industry sector.

Oil and Gas Extraction - All oil and gas field services (1987 SIC's 1381, 1382, 1389) were transferred to the new 1997 subsector Services Incidental to Mining. There were no changes in the existing 1987 industries.

Coal Mining - 1987 SIC 1241, Coal Mining Services, was transferred to the new 1997 subsector Services Incidental to Mining. There were no changes in the existing 1987 industries.

Metal Ore Mining - 1987 SIC 1061, Ferroalloy Ores, Except Vanadium, has been split into two new industries, Copper and Nickel Mining and Other Metal Ore Mining. 1987 SIC 1081, Metal Mining Services, was transferred to the 1997 subsector Services Incidental to Mining. There were no changes in the other existing 1987 industries.

Non-Metallic Mineral Mining and Quarrying - 1987 SIC 1499, Miscellaneous Non-Metallic Minerals, except Fuels, has been split between Other Crushed and Broken Stone Quarrying and Mining (bituminous limestone and bituminous sandstone) and All Other Non-Metallic Mineral Mining (all other miscellaneous non-metallic minerals). 1987 SIC 1481, Non-Metallic Mineral Services, except Fuels, was transferred to the 1997 subsector Services Incidental to Mining. There were no changes in the other existing 1987 industries.

Support Activities for Mining - This new subsector was created to include all incidental mining services. No new industries were created within this subsector; however, six existing industries were transferred out of the 1987 SIC industry groups based upon the mineral/ore mined into this subsector.

The number of Mining Industries decreased from 31 in 1987 to 30 in 1997. For time series linkage 30 of the 31 1987 industries are comparable within three percent of the 1997 industries.