

CHAPTER 32

EXTRACTIONS, MINING, AND GRAVEL PITS

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10-32-1: PURPOSE: The purpose of this Chapter is to provide for the economical availability of sand gravel, rock, soil and other materials vital to the continued growth of the region and the City, to establish reasonable and uniform limitations, safeguards and controls in the City for the future production of such minerals, and to control and minimize pollution caused by erosion or sedimentation, all in furtherance of the health, safety and general welfare of the citizens of the City. The City of St. Francis finds that the extraction of minerals by surface mining is a basic and essential activity making an important contribution to the economic well-being of the City. The economical availability of sand, gravel, rock, soil and other materials is vital to the continued growth of the region and the City. The City further finds that it is not practicable to extract minerals required by society without disturbing the surface of the earth and producing waste materials. The danger exists that non-compatible land uses could unnecessarily deny the benefit of these materials to society in the future. It is further found that the character of mining may create undesirable land and water conditions which can be detrimental to the health, safety and welfare and property rights of the citizens of the City. However, if properly regulated and if rehabilitation of surface mined lands is required, mining can take place within the City in such a manner that undesirable side effects of the operation may be restricted to an acceptable level.

10-32-2: PERMIT REQUIRED; ADDITIONAL PERMITS: No person shall open, operate or maintain either directly or indirectly any active or inactive excavation for extractive purposes or process any sand, gravel, rock, other soils, or derived products unless such person shall first have obtained from the City, any and all permits, an excavation (mining) permit as required in this Ordinance, and an interim use permit. An extraction license and conditional use permit shall not be required for any of the following:

- A. Extraction for the purpose of the foundation, cellar or basement of some immediately pending superstructure to be erected, built or placed thereon contemporaneously with or immediately following such extraction, provided that a building permit has first been issued.
- B. Extraction in reliance on and in accordance with an approved development plan or grading plan.
- C. Extraction by the State, County or City authorities in connection with construction or maintenance of roads or highways or utilities, provided such activity is conducted within the road or highway right-of-way or utility easement.
- D. Curb cuts, utility hook ups or street openings for which another permit is required from the City. Where another license or permit is not required or obtained, the extraction license provided for in this Chapter shall be required.
- E. Extraction of less than one hundred (100) cubic yards. Such extractions, however, will be subject to a staff permit found in Section 10-31 of this Ordinance which will address erosion control, traffic, streets, safety, noise, hours of operation, duration of activity, and environmental factors. If these factors cannot be adequately addressed, the permit may be denied.
- F. Extractions or grading for agricultural purposes. Such extractions will require a Staff Permit as provided for in Section 10-31 of this Ordinance.
- G. Excavation, filling, or grading for purposes other than extraction, mining, or gravel pits. Such activity is permitted in Section 10-31 of this Ordinance.

10-32-3: APPLICATION FOR PERMIT: Application for a permit under this Ordinance shall be made in writing to the City on such form as the City may from time to time designate, and shall include the following information:

A. Minimum Requirements.

- 1. The correct legal description of the premises where pursuant to this Ordinance, the excavation, removal, processing, recycling, storage or other handling of rock, sand, dirt, gravel, clay, or derived products does or shall occur.
- 2. The names and addresses of the applicant, operator and owner of the land.

3. The primary highways, streets or other public ways within one (1) mile of the boundaries of the pit within the City upon and along which the material excavated or removed shall be transported in normal operation.
4. A map of the proposed pit or excavation are to a scale of one (1) inch equals two hundred (200) feet showing the presently excavated area, the area proposed to be excavated during the permit period, and the minimum and maximum elevations of the area, and showing a minimum of one hundred (100) feet of the adjacent land on all sides of the proposed excavation area.
5. A rehabilitation and restoration plan providing for the orderly and continuing rehabilitation of all excavated land. Such plan shall illustrate, using appropriate photographs, maps, and surveys drawn to a scale of one (1) inch equals two hundred (200) feet and with a five (5) foot contour interval satisfactory to the City Engineer, the following:
 - a. The removal or planned contours of the land when the mineral removal operations are completed.
 - b. The estimated period of time that the pit will be operated and a schedule setting forth the timetable for excavation and rehabilitation of land lying within the active, inactive and restoration areas.
 - c. Those areas of the site currently used for storage of topsoil and overburden.
 - d. The depth of all water bodies, the slopes of all slopes after rehabilitation and a description of the type and quantity of plantings where re-vegetation is to be established.
 - e. A hydrogeological study when restoration activities will or may involve the filling of any groundwater excavation. No groundwater excavation shall be filled, in whole or in part, without prior City approval. The hydrogeological study shall include the following:
 - (1) Description of each groundwater excavation (size, shape and location).
 - (2) Description of the proposed fill activity (grain size distribution, quantity, and placement procedure).
 - (3) Description of the aquifer characteristics in the area of each groundwater excavation to be affected by proposed fill activity (aquifer thickness and general geological setting).

- (4) Description of the impacts of the proposed fill activity on ground water flow regimes.
- (5) Such other information as the City may from time to time require.
- f. Location of any and all existing wells and the size and depth thereof.
- g. Such other information as the City may from time to time require, including, but not limited to, the location or anticipated location of all stockpiles of aggregate-based construction debris material on the land for which the permit is desired.

10-32-4: BOND: The applicant for a permit under this Chapter shall post a bond acceptable to the City in an amount based upon an assessment by the City Engineer for an amount per acre or portions thereof for active areas for which a permit is granted, executed by a corporate surety company authorized to do business in the State, conditioned upon full performance of the terms and conditions of this article by the applicant and/or the owner of the premises described in the application, such bond to remain in full force and effect for a minimum period of time of one year after expiration of the permit, which bond shall guarantee the required restoration as well as the other requirements of this Chapter. The surety bond shall be written with an insurance company having a minimum Best's Key Rating Guide of A-VII, or as approved by the City's Insurance Agent.

10-32-5: INSURANCE REQUIREMENTS: The applicant for a permit under this Ordinance furnish insurance policies or certificates of insurance acceptable to the City, and issued by an insurance company authorized to do business in the State for coverage and limits as set forth below:

- A. Comprehensive general liability policy on an occurrence basis and having minimum combined single limits as follows:

General Aggregate	\$1,000,000.00
Products-Comp/Ops Aggregate	\$1,000,000.00
Personal and advertising injury	\$1,000,000.00
Each Occurrence	\$1,000,000.00

- B. The policy shall be for the full period of the permit, and such policy shall include, but not be limited to, explosion, collapse, and underground hazards, contractual, and independent contractor's coverage, and proof of insurance to the City shall state such coverage. The City shall be named as an additional insured for any work performed on City property or premises.

- C. Business auto policy covering owned (if any), non-owned, and hired autos with minimum combined single liability limits of \$1,000,000.00 each accident.
- D. Workers' compensation and employers' liability as required by the state.
- E. Should any policies be canceled or not renewed for any cause before expiration date thereof, the issuing company shall mail thirty (30) days' written notice to the City, except such notice shall be ten (10) days for non-payment of premium.
- F. If a policy is terminated for any reason, the permit shall be automatically suspended upon the day the policy terminates, unless a new policy or certificate of insurance complying with this section is obtained and filed with the City prior to the termination of the policy in force.
- G. The insurance policies shall be written with an insurance company having a minimum Best's Key Rating Guide of A-VII, or as approved by the City's Insurance Agent.

10-32-6: ANNUAL INSPECTION: At least once a year, or more often if deemed necessary, the City shall inspect all extraction sites where an extraction license and conditional use permit have been issued pursuant to this Chapter and report such findings to the City Council. The operator or owner of any extraction operation found in violation of the requirement of this Chapter or its extraction license or conditional use permit shall remedy such violation within the time specified by written notice from the City.

10-32-7: PERMIT FEES: The applicant or owners of the premises shall annually submit to the City written estimates of the total area of the mineral extraction operation (expressed in acres) to be actively mined during the forthcoming year and the total area for which a conditional use permit permitting mineral extraction operations has been granted (expressed in acres) which will not be actively mined in the forthcoming year. The applicant or owner shall pay a fee to the City based on the following:

- A. **Annual Fee Required.** An annual permit fee in an amount duly established by Resolution for each active or inactive gravel pit or excavation operated by the applicant shall be paid by each applicant for a permit and shall be paid at the time of making the application. If the permit is not granted, the fee shall be refunded to the applicant. The permit period shall run from March 1st to March 1st of the following year.
- B. **Calculation of Annual Fee.** The total annual permit fee shall equal the sum of an active pit fee plus an inactive pit fee, minus a restoration credit, all as calculated pursuant to the following formulas and subject to a minimum total

annual permit fee as set forth by Resolution. Land areas for permit purposes shall be calculated by totaling acreage of parcels of land or portions thereof that have been geometrically divided by straight lines in order to facilitate area calculations.

1. Active Pit Fee: (Acreage of land under active classification) X (fee per acre established by resolution)
2. Inactive Pit Fee: (Acreage of land under inactive classification) X (fee per acre established by resolution)
3. Restoration Area Credit: (Acreage of land which has been completely restored during the previous license year) X (credit per area established by resolution). The restoration credit shall cease once the land is in conformance with the approved restoration or rehabilitation plan.

C. **Refunds or Prorating.** Once the permit is granted to the applicant by the City, the termination of activities at the pit or excavation or revocation of the permit shall not entitle the applicant to a refund or prorating of any of the license fee that has been paid for that current year.

D. **Furnishing of Maps.** If the application is for a renewal of an existing permit, the applicant need not furnish the maps specified in this Chapter unless major modifications or changes are to be made in the approved restoration plan of the land when gravel removal operations are completed.

10-32-8: RENEWAL OF PERMIT: If the application is for renewal of an existing permit previously issued pursuant to this Chapter, the operator shall bring the completed application and all necessary bonds, insurance and fees to the City and City Staff shall review the application and forward the information to the City Council.

10-32-9: AUTHORITY TO IMPOSE ADDITIONAL REQUIREMENTS: The City, as a prerequisite to the granting of a permit under this Chapter or after such permit has been granted, may impose such further restrictions and requirements as may be reasonable and necessary under the particular circumstances of each application. Such restrictions and requirements may be in contract form with the applicant or any other person interested directly or indirectly in the issuance of such permit.

10-32-10: STANDARDS FOR OPERATION AND SITE: Every person to whom a permit is issued under this article shall comply with the following regulations and requirements:

- A. **Limits of Excavation.** No excavation or digging shall be made beyond the limits for which the particular permit is granted, and in no case shall any excavation or digging be made within thirty (30) feet of any adjoining road right-of-way or structure as may be in the area without obtaining specific approval by the City.
- B. **Guardrails and Berms along Roadways.** Where excavations are made within thirty (30) feet of a public roadway or right-of-way, the permittee shall erect either a suitable guardrail along the right-of-way or roadway or construct a dirt berm not less than thirty (30) inches in height and six (6) feet in width at the base.
- C. **Reduction of Dust, Noise, and Nuisance.** All reasonable means shall be employed by the applicant to reduce dust, noise and nuisances.
- D. **Maximum Slopes.** During the entire period of operations, all excavations other than the working base shall be sloped on all sides at a maximum ratio of one (1) foot horizontal to one (1) foot vertical, unless a steeper slope shall be approved by the City Engineer. Where excavations are adjacent to a public roadway or other right-of-way, the excavation shall have a maximum four to one (4:1) slope. Slopes adjacent to or contiguous to bodies of water shall be sloped at a maximum of six to one (6:1).
- E. **Appearance and Screening.** Appearance and screening of the site shall comply with the following standards:
1. Machinery shall be kept in good repair and painted regularly.
 2. Abandoned machinery and rubbish shall be removed from the site regularly.
 3. All structures that are not being used shall be removed from the site.
 4. All equipment and temporary structures shall be removed and dismantled not later than six (6) months after termination of mining operations or expiration of the permit.
 5. Where practical, stockpiles of overburden and materials shall be used to screen the mining site.
 6. Where practical, the perimeter of the mining site shall be planted or otherwise screened.
 7. Existing trees and ground cover shall be preserved to the greatest extent feasible, maintained and supplemented by selective cutting, transplanting and replanting of trees, shrubs and other ground cover along all setback areas.

F. **Operating Standards.** Operating standards shall be as follows:

1. **Noise.** The maximum noise level at the perimeter of the site shall be within the limits set by the state pollution control agency and the United States Environmental Protection Agency.
2. **Hours.** All mining operations shall be conducted between 7:00 AM and 7:00 PM, Monday through Saturday, except with approval from the City Council.
3. **Dust.** Operators shall utilize all practical means to reduce the amount of dust caused by the operation. In no case shall the amount of dust or other particulate matter exceed the standards established by the State Pollution Control Agency.
4. **Water Pollution.** Operators shall comply with all applicable state pollution control agency regulations and federal and Environmental Protection Agency regulations for the protection of water quality. No waste products or process residue, including untreated wash water, shall be deposited in any lake or natural drainage system, except that lakes or ponds wholly contained within the extraction site may be so utilized.
5. **Top soil preservation.** All top soil shall be retained at the site until complete rehabilitation of the site has taken place according to the rehabilitation plan.

G. **State and Federal Approvals; Control by City.** The permittee shall notify the City of any approvals required by any State or Federal pollution control agencies for any of the permittee's operations and shall provide the City with copies of any such agencies permission that is granted with regard to the handling of materials involved in processing or recycling operations as referred to in this Chapter. The permittee shall, after notice and an opportunity to be heard by the City Council, change, alter, or modify immediately any excavation or operation deemed by the City to be unsanitary, dangerous, polluted, or contrary to the general health and welfare of the community, or contrary to any approval of any such pollution control agency.

H. **Securing of Abandoned Wells.** All wells greater than six inches in diameter placed in or upon the premises described in the application shall be secured and capped upon abandonment under the specific direction of the City Engineer or designated agent.

I. **Disposal of Waste Water.** Applicants shall dispose of all waste water used on the site in a manner which will not adversely affect adjoining property and shall

use stilling ponds or other methods satisfactory to the City for disposing of the suspended solids in the waste water.

- J. **Access Roads.** Applicants shall provide adequate access roads to and from the site which shall have proper sight distances for traffic safety at each point of access.
- K. **Compliance with Road Limits.** Applicants shall obey all State, County and municipal road limits in hauling to and from the site.
- L. **Cessation of Operation.** If operations cease, completely or substantially, on the site for a period of more than one year, or if substantially all gravel and sand deposits thereon have been removed and no further operations shall be conducted thereon, then the City may terminate the permit to operate the pit and declare the site a restoration area subject to all requirements of the site's restoration plan and bonding requirements.
- M. **Operation by Person Other Than Applicant.** The applicant shall not permit any other person to operate the pit, other than hauling to or from the pit, without first obtaining the written consent of the City and an appropriate acknowledgement of such others that they will be bound by an agreement in effect and covered by the bond.
- N. **Stockpiles.** Stockpiles of active operations shall be regulated as follows, subject to modification by the City when materials not listed are proposed for stockpiling:
 - 1. **Materials.** Stockpiles may consist of granular (aggregate) and non-granular soils; unprocessed aggregate-based construction debris materials, including, but not limited to, concrete, reinforced concrete, cement, concrete block products, and bituminous pavement; processed materials containing no individual pieces larger than three (3) inches, with more than fifty (50) percent of the individual pieces no larger than two inches, produced from the recycling or crushing or aggregate-based construction debris materials; common borrow, topsoil and pulverized topsoil; and petroleum-contaminated soil being managed pursuant to state (MPCA) and County approval.
 - 2. **Size.** The size of stockpiles shall be limited based upon site conditions and as follows:
 - a. Stockpiles consisting of overburden materials, non-granular inorganic soils, granular soils and sorted by products, and processed materials produced from the recycling or crushing of aggregate-based construction debris materials may be unlimited in size.

- b. The total size of an operator's unprocessed aggregate-based construction debris material stockpiles on any December 31 shall not exceed four (4) times the highest annual volume of materials produced from the recycling or crushing of aggregate-based construction debris materials sold and/or used by the operator from City processing locations in the previous five calendar years.
 - c. The size of petroleum-contaminated soil stockpiles shall comply with any and all federal, state and City limitations, except that stockpiles consisting of petroleum-contaminated soils treated pursuant to state (MPCA) and County approval shall be limited to a maximum quantity of fifty thousand (50,000) cubic yards.
 - d. The size of stockpiles of common borrow materials and other soils unsuitable for restoration fill, and stockpiles of topsoil and pulverized topsoil in excess of eight hundred (800) cubic yards per acre, shall require approval of the City. Approval shall be dependent upon factors such as, but not limited to; the material to be stockpiled, the reason for and location of the stockpile and the length of time the stockpile will remain.
3. Location. The location of stockpiles shall comply with the following requirements:
- a. All aggregate-based construction debris material stockpiles shall be located in accordance with the permit application. The location of all other stockpiles shall be as stated in this subsection, or as otherwise approved by the City.
 - b. Stockpiles of granular soils, sorted byproducts and processed aggregate-based construction debris material shall be located to screen the processing or recycling operations from other incompatible land uses, unless such location is not safe or not feasible because of specific stockpile area conditions. For purposes of this Chapter, incompatible uses shall include, but not be limited to, residential and park areas, non-mining and non-industrial uses, and uses not involving outdoor storage.
 - c. Stockpiles of petroleum-contaminated soils shall be located in accordance with any and all federal, state and county permit requirements.
 - d. Control of Nuisances, removal of residual wastes. Stockpiling must be done in a manner that minimizes dust and other windblown material, vermin population due to improper storage, and other

nuisance conditions. All non-earth residual wastes shall be removed at least once a year.

- e. **Bond.** To ensure the proper operation and closure of stockpile areas, and to provide for corrective actions, the applicant for a permit required pursuant to this Chapter shall submit a bond on or before March 1 of each year, conditioned upon full performance of the terms and conditions of this article by the applicant and/or owner of the premises described in the application. The bond shall be executed by a corporate surety company authorized to do business in the state and shall remain in full force and effect for a minimum of one year after expiration of the permit. The amount of the bond shall be calculated by determining the number of cubic yards of unprocessed aggregate-based construction debris materials stockpiled at the active gravel pit or excavation as of the previous December 31, subtracting an amount equal to two times the highest volume of annual sales or use of materials produced from the recycling or crushing of aggregate-based construction debris material in the City by the operator in the previous five calendar years, and multiplying the remaining number of cubic yards by \$1.00. The bond shall be in addition to the restoration bond required pursuant to this Chapter.
- 4. **Removal.** Stockpiles must be consumed or removed at such time that the permit required under this Chapter is no longer requested or issued, unless otherwise approved by the City in accordance with conditions associated with permits granted under this Chapter.
- 5. **Records.** The operator shall maintain sufficient records so as to permit the City to monitor and administer this Chapter and shall make those records available to the City for inspection during regular business hours of the City

10-32-11: REHABILITATION AND RESTORATION STANDARDS: Site rehabilitation and restoration shall be a continuing operation occurring as quickly as possible after the mining operation has moved sufficiently into another part of the extraction site. Site rehabilitation and restoration shall comply with the following standards:

- A. **Slopes.** All banks and slopes shall be left in accordance with the rehabilitation plan submitted with the permit application. No rehabilitated slopes shall be steeper than four (4) feet horizontal to one (1) foot vertical, except that steeper slopes may be permitted in accordance with the rehabilitation plan when the slopes are planned for slope-related usages, such as ski and sliding hills.

- B. **Cover and Planting.** Slopes and graded and backfilled areas shall be surfaced with at least three inches of topsoil and planted with ground cover sufficient to hold the soil. Such ground cover shall be tended as necessary until it is self-sustained.
- C. **Slopes to Water Bodies.** No slope descending to a water body shall exceed one foot vertical to size feet horizontal, except that steeper slopes may be permitted in accordance with the rehabilitation plan when human or property safety is not endangered.
- D. **Rehabilitation of Water Bodies.** All water areas resulting from excavation shall be rehabilitated as follows:
1. The bottom contour must be gradually sloping from the shoreline to the deepest portion at a maximum slope of six (6) feet horizontal to one (1) foot vertical for at least thirty (30) feet unless fenced pursuant to plans previously approved by the City.
 2. The water depth in the deepest portions must not be less than five (5) feet measured from the low-water mark.
- E. **Final Elevation.** No part of the rehabilitated area which is planned for utilization for uses other than open space or agriculture shall be at an elevation lower than the minimum required for gravity connection to sewer and storm sewer.
- F. **Enforcement.** To ensure the restoration plan approved by the City is being followed, the City Engineer may make those field measurements deemed necessary by the City to ensure that the approved restoration plan is being followed and the permit holder hereby allows entry for that purpose.
- G. **Duties Upon Cessation of Operation.** Upon ceasing operation or leaving any particular excavation area in an excavation or pit site, applicants shall re-grade and restore the area as required in this Chapter and in accordance with the approved restoration or rehabilitation plan previously agreed upon by the City and operator or owner of the pit or to such other usable condition which is agreed upon by the permittee and the City at the time of the required restoration.
- H. **Active Gravel Pits.** Restoration and rehabilitation are not mandatory in an active gravel pit area but may be concurrent with other operations is possible.
- I. **Compliance with Rehabilitation Plan.** Restoration and rehabilitation are mandatory and must take place according to the approved restoration and rehabilitation plan and schedule, and each day's violation shall be deemed a separate offense.

- J. **Monitoring of Imported Soils.** The City may require adherence to a soil monitoring program approved by the City with regard to soils imported for use in rehabilitation or restoration.
- K. **Standards for Filling and Compaction.** Prior to rehabilitation and/or restoration, the operator shall set forth to the City Engineer the location, area, and depth of the land before and after the anticipated activity. Such activity and the materials used shall be subject to the following:
1. Prior to such activity, the operator shall submit an engineering analysis of the proposed fill and compaction method to the City Engineer. Side slopes of the excavation shall be graded to a minimum one to one (1:1) slope prior to placement of fill.
 2. Unless otherwise approved by the City, materials including, but not limited to, organic soils and debris (topsoil, peat muskeg, muck, stumps, roots, logs, brush, etc.) demolition debris (broken concrete or bituminous fragments, brick, lumber, metal, etc.) and any other solid or hazardous wastes shall not be used as fill in rehabilitation and restoration.
 3. Imported materials used as fill in rehabilitation and restoration shall consist of mineral soils which typically demonstrate a minimum soil bearing capacity of one thousand five hundred (1,500) psf and are suitable for building foundations.
 4. The top ten feet of all fill areas shall be compacted by mechanical equipment as the fill is placed, unless otherwise approved by the City, to a minimum of ninety-five (95) percent of maximum density for a particular soil as determined by the Standard Proctor method.