



Application for a Gas Processing Plant

1 An application under section 17 of *The Oil and Gas Conservation Act* for approval of a gas processing plant shall contain, where possible:

- (a) A map or maps covering the area within a 16 kilometre radius of the plant showing:
 - (i) the plant location;
 - (ii) the topography of the area;
 - (iii) the location of all lakes, streams and other surface bodies of water in the area;
 - (iv) the location, where practical, of all occupied buildings within an 8 kilometre radius of the plant;
 - (v) the location of other gas processing or industrial plants in the area;
 - (vi) the gathering facilities including line size;
 - (vii) the general land use of the area.
 - (b) A detailed description of the overall process scheme proposed.
 - (c) Tabulation of:
 - (i) the analysis of the raw gas from each pool from which the gas would be gathered and a composite analysis of the feed gas to the processing plant under normal operating conditions and anticipated conditions of maximum hydrogen sulfide content;
 - (ii) an overall plant material balance based on normal operating conditions and anticipated conditions of maximum hydrogen sulfide inlet rate;
 - (iii) a forecast of the raw gas to be processed and the plant products to be recovered by years over the life of the scheme.
 - (d) A discussion of the reasons for the choice of the plant location having regard to the control of pollution.
 - (e) A statement as to whether or not the proposed plant has been discussed with residents of the area, and their reactions.
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- (f) Technical evidence and cost data in support of the proposed recovery level of sulphur and hydrocarbon including an economic evaluation of the feasibility of conserving any sulphur or hydrocarbons that would not be recovered.
- (g) A detailed description, including dimensions, operating condition, and emissions from any incinerator or flare stacks.
- (h) A detailed description of the methods proposed for control of hydrocarbon vapor emissions including emissions from product storage tanks.
- (i) A detailed description of the method by which and the manner in which the release of any other contaminant to the atmosphere during normal or abnormal plant operations would be controlled.
- (j) A general discussion of the methods proposed for control of noise.
- (k) A general discussion of the manner in which water produced in association with gas and oil would be treated and disposed of.
- (l) A general discussion of the manner in which any process waste water would be contained, treated, and disposed of.
- (m) A general discussion of the manner in which surface water drainage within the plant process and storage area would be contained, treated, and disposed of.
- (n) Figures showing:
 - (i) a process flow diagram of the proposed facilities;
 - (ii) the facilities for measurement of all streams entering and leaving the processing plant or directly affecting the measurement of such streams.
- (o) A discussion of product specifications and composition and the facilities to be provided for product storage.
- (p) A discussion of the provisions made for marketing or conservation of all plant products including contracts, prices, etc.
- (q) A scale plan of the plant site showing the location of processing, storage, and other facilities.
- (r) A discussion of the type and the amount of chemicals and processing materials to be used.
- (s) A statement of the calculated concentration and emission rate of every contaminant that would be discharged from the plant.
- (t) An outline of emergency procedures to ensure public safety, that will be followed in the event of an uncontrolled release of contaminants to the air, water or land.

- (u) A general discussion of the feasibility of using a single large gas processing plant in the area of the application, rather than two or more smaller plants or the feasibility of expanding a nearby existing gas processing plant to handle the additional gas which is to be processed in the proposed plant.
 - (v) A general discussion of the capital costs of the plant and the expected operating costs.
 - (w) Such further information as the department may require.
- 2 The submission shall be in written and illustrated form, signed by an officer of the company making the application, and appropriately bound.
 - 3 Submit three (3) copies of each application to:

Engineering Services Branch
Saskatchewan Industry and Resources
200 - 2101 Scarth Street
Regina, Saskatchewan S4P 2H9
 - 4 A separate submission must be submitted to Saskatchewan Environment according to their guidelines and requirements. A copy of the submission to Saskatchewan Environment may be submitted to meet the requirements under these guidelines regarding items common to both sets of guidelines.
 - 5 For further information contact Rick McLean at (306) 787-2596.

Note:

1. For the purposes of these guidelines, a gas processing plant includes a plant which uses a low temperature separation or selective adsorption process to remove liquids from the gas stream or a plant which uses an amine or similar process to sweeten the gas. A facility which involves only dehydration or iron sponge sweetening of gas does not require an application and approval under these guidelines.
2. Gas compression facilities at a gas plant will be considered to be part of the gas processing plant and will require approval as part of the plant.
3. Any modifications to an existing plant will require approval by Saskatchewan Industry and Resources. Contact the Engineering Services Branch to determine what information must be submitted for approval of a plant modification.
4. An application for a plant which includes only amine sweetening facilities may not require all of the information listed above. Contact the Engineering Services Branch for further information.